



helvella - **World Desiccated Thyroid**

Last updated:

Saturday, 12 April 2025 17:11

If the last updated date isn't very recent, please download a new copy!

<https://www.dropbox.com/scl/fi/bkoeu3yn2wwqmtlga1nda/helvella-World-Desiccated-Thyroid.pdf?rlkey=0y37h8vp30m5zb4a5znz1gjoj&st=8a2zdc5g&dl=1>

@ Copyright helvella 2016 through last updated date. All rights reserved. No part of this publication may be reproduced or transmitted in any form, electronic or mechanical, including photocopying, recording or by means of any information storage or retrieval system without prior permission in writing from the author; or ii) used or reproduced in any way for the training, development or operation of artificial intelligence (AI) technologies, including generative AI technologies. The rights holders expressly reserve this publication from the text and data mining exception as per Article 4(3) of the Digital Single Market Directive (EU) 2019/190.

Table of Contents

Table of Contents	2
Introduction	6
Desiccated Thyroid - DTE vs NDT vs Glandulars.....	8
Thyroid Extract	8
Desiccated Thyroid Extract (DTE).....	9
Natural Desiccated Thyroid (NDT)	12
Thyroid USP Definition.....	14
Discussion.....	15
Glandulars	15
Bovine and Porcine	17
Added Ingredients	17
Untested.....	18
Consistency	18
Why take a thyroid glandular?.....	18
Changing Thyroid Glandular Makes	18
Desiccated Thyroid Equivalence	19
How much more potent is liothyronine than levothyroxine?	19
Hormone Content	19
Thyroid USP Hormone Equivalence Content	21
Desiccated Thyroid H03AA05	23
Thyroid Hormone Content.....	23
Matrix of Desiccated Thyroid Products - Current	25
Matrix of Desiccated Thyroid Products - Non-current	27
Desiccated Thyroid Ratios	28
❖ AbbVie - Armour Thyroid.....	30
❖ Acella - NP Thyroid.....	33
❖ ANI - Thyroid USP	36

- ❖ APur - Thyroid (thyroid tablets, USP)38
- ❖ Azurity - Adthyza Thyroid.....40
- ❖ Erfa - Thyroid by Erfa42
- ❖ Greater Pharma - Thiroyd †.....44
- ❖ Kachhela Shytomel Duo.....45
- ❖ LGM - thyroid tablets, USP46
- ❖ Niva - Thyroid48
- ❖ RLC - Nature-Throid †51
- ❖ RLC - WP-Thyroid † formerly Westhroid Pure52
- ❖ Sriprasit - Thyroid S.....53
- ❖ T.MAN - TR Thyroid †54
- ❖ Other brands and makes.....55

Details of Compounded Desiccated Thyroid capsules56

- ❖ CompoundLabs - Whole Thyroid Capsules57
- ❖ De Natuur Apotheek - Thyreoïdum.....58
- ❖ Glostrup apotek - unnamed59
- ❖ Green Dispensary - unnamed.....60
- ❖ Kloesterl Apotheke - Thyreogland61
- ❖ Receptura - unnamed62
- ❖ Roseway - Natural Desiccated Thyroid capsules.....63
- ❖ Schlossplatz Apotheke - unnamed.....64
- ❖ Weltapotheker - unnamed.....65

Thyroid Glandulars.....66

- ❖ Allergy Research Group - Thyroid Natural Glandular Capsules 68
- ❖ American Biologics - Thyroid Glandular †.....69
- ❖ Ancestral - Grass Fed Beef Thyroid70
- ❖ Bio-Design - Thyroid Glandular Nutritional Support formerly Thyroid 130.....71
- ❖ Biotics Research - GTA-Forte72
- ❖ Biotics Research - GTA-Forte-II.....73
- ❖ Doctor's Choice - Thyrodine74
- ❖ Dr Ron's - Thyroid.....75
- ❖ Dr Westin Childs' - Thyroid Glandular+76

- ❖ Eastern Pharmaceuticals - Real Thyroid77
- ❖ Eastern Pharmaceuticals - VitaliThy78
- ❖ Emerald Laboratories - Thyroid Health79
- ❖ Endo-met - Thyro Complex.....80
- ❖ Evolved Elements - Thyroid81
- ❖ Forefront - Raw Desiccated Thyroid.....82
- ❖ Nameless - Tru Thyroid †83
- ❖ Natural Sources - Raw Thyroid84
- ❖ Natural Thyroid Solutions - Thyrogold.....85
- ❖ Numedica - Thyrodex T-150.....86
- ❖ Nutriest - Grass-Fed Desiccated Beef Thyroid87
- ❖ Nutri-Meds - Desiccated Bovine Thyroid Health Capsules88
- ❖ NXGEN - Nxgen Grass Fed Beef Thyroid89
- ❖ Piping Rock - Grass Fed Beef Thyroid90
- ❖ Piping Rock - Ultra Thyroid Support91
- ❖ Procepts - Metavive I, II Porcine.....92
- ❖ Procepts - Metavive III, IV Bovine.....93
- ❖ Professional Health Products - Eco Thyro94
- ❖ Provanz - Thyrovanz Bovine Thyroid Glandular.....95
- ❖ Regenerative Nutrition - Thyro Active 2 Porcine.....96
- ❖ Regenerative Nutrition - Thyro Active 2 Bovine97
- ❖ Solaray - Thyroid Caps.....98
- ❖ Swanson - Thyroid Glandular99
- ❖ The Wellness Way - Thyroid Glandular.....100
- ❖ Transformation - Thyroid Complex101
- ❖ Ultra Enterprises - Raw Thyroid.....102
- ❖ Vinco - Thyroid Gland.....103
- ❖ Other brands and makes.....104

Thyroid USP Manufacturers.....105

Appendixes107

- A. ATC Codes108
- B. Brand and Generic Names.....109
- C. Companies - Manufacturers, Importers and Distributors111

D. Key to Symbols120
E. Excipients121

Introduction

This document is intended to give an overview of various thyroid hormone medicines and supplements that are derived from animal thyroid glands.

(There are separate documents for World Levothyroxine, World Liothyronine and a UK-specific one with much more detail.)

Please always check, re-check and check again everything which is important to you.

Re-branding (whether by a manufacturer or as an 'own label supplier') - which has happened with several products - does not necessarily mean any change to formulation. Many products have been acquired by other companies and, sometimes after several years, get re-branded.

Medicines are prone to issues of supply and recall. Just because products are listed here does not mean they are available. Some might have been withdrawn entirely or just from certain markets. Others might have been included despite not yet being available.

Errors and omissions accepted

If you find anything inaccurate in this document, or if you can fill any of the many gaps, let me know by Private Message, or on the HealthUnlocked Thyroid UK forum:

<https://healthunlocked.com/user/helvella>

As of 20th November 2022, you may also email me at:

edition-longing-0u@icloud.com

Be aware that this email address is ONLY for use regarding helvella documents. If I get unwanted emails, such as spam, I shall change the email address.

Please don't think that pointing out issues is being pernickety, pedantic or critical. It could make all the difference to someone.

This document is updated whenever I am aware of any changes or enhancements are needed. Sometimes there could be a significant delay between a change happening and it being reflected in this document.

Check the *Last updated date* on the front page. This document is updated frequently. If the copy you are viewing is more than a few weeks old, please try downloading it again.

Printing

This document is formatted as A5. If you wish to print some or all of this document, assuming you are using a A4 (or US Letter) printer, you might find you need the following settings (based on printer dialogue under macOS - Windows, etc., will likely have the same features but might use different terms):

Pages per sheet = 2

Scale to fit

Autorotate

Desiccated Thyroid

- DTE vs NDT vs Glandulars

Thyroid Extract

The history of using animal thyroid for treating hypothyroidism traces back to around 1890 when a sheep thyroid, or half of it, was transplanted into a woman. Whilst that failed, the earliest results did suggest that it was the juices of the thyroid that made the woman's state improve for a while.

George Redmayne Murray followed through on this by extracting and filtering the contents of a sheep thyroid gland. The resultant liquid, a true thyroid extract, actually worked, which was proof of this approach.

Thus, the term thyroid extract dates back at least to George Redmayne Murray in his 1891 paper.

Note on the Treatment of Myxoedema by Hypodermic Injections of an Extract of the Thyroid Gland of a Sheep

<https://pubmed.ncbi.nlm.nih.gov/20753415/>

Other similar references from 1892:

'Dr. Head, Dr. Purser, and I, about this time, discussed the advisability of adopting the treatment which had been used by Dr. George R. Murray, of Newcastle-on-Tyne, with considerable success, namely, the hypodermic injection of an extract of the thyroid gland of a sheep.'

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2419899/pdf/brmedj08838-0008.pdf>

**A CASE OF MYXOEDEMA WITH INSANITY
TREATED BY INJECTION WITH
EXTRACT OF THYROID
GLAND**

<https://europepmc.org/backend/ptpmcrender.fcgi?accid=PMC2420041&blobtype=pdf>

THYROID EXTRACT FOR MYXOEDEMA.

Desiccated Thyroid Extract (DTE)

The term desiccated thyroid extract dates back at least to 1894. The point about the term as used at the time was that, instead of being a liquid extract, the actual gland was dried and powdered. (As with liquid extracts, the animal glands were cleaned and defatted).

Communications.-Dr. JOHN BLACK showed the following specimens: (1) Cyst removed from Palm of Hand; (2) Bullet Wound in Spinal Column.- Dr. FARRELL reported a case of Goitre, treated by desiccated thyroid extract (Armour) with the best of results.

<https://europepmc.org/backend/ptpmcrender.fcgi?accid=PMC2405670&blobtype=pdf>

Entry from British Pharmacopoeia 1898

THYROIDEUM SICCUM.

Dry Thyroid.

A powder prepared from the fresh and healthy thyroid gland of the sheep. Remove the external fat and connective tissue from thyroid glands taken from sheep immediately after killing. Cut the glands across, and reject any which contain cysts, are hypertrophied, or otherwise abnormal. Mince finely the healthy glands, and dry at a temperature of 90° to 100° F. (32·2° to 37·8° C.); powder the dried product; remove all fat from it by treatment with *petroleum spirit*; and again dry the residue.

Characters.—A light dull-brown powder, with a very faint meat-like odour and taste, and free from any flavour of putrescence. It is liable to become damp on exposure to the air, and then deteriorates.

Dose.—3 to 10 grains.

THYROIDEUM SICCUM.

Dry Thyroid.

A powder prepared from the fresh and healthy thyroid gland of the sheep. Remove the external fat and connective tissue from thyroid glands taken from sheep immediately after killing. Cut the glands across, and reject any which contain cysts, are hypertrophied, or otherwise abnormal. Mince finely the healthy glands, and dry at a temperature of 90° to 100° F. (32-2° to 37-8° C.) powder the dried product ; remove all fat from it by treatment with petroleum spirit ; and again dry the residue.

Characters. — A light dull-brown powder, with a very faint meat-like odour and taste, and free from any flavour of putrescence. It is liable to become damp on exposure to the air, and then deteriorates.

Dose. — 3 to 10 grains.

The process does not really use any extractive processes. I don't think you can consider cutting off connective tissue and fat as extraction. (Though others may disagree.) The use of a solvent to defat is an extractive process - but it extracts fats from the thyroid gland rather than producing an extract.

However, if you think of it as being a desiccated form of the existing liquid thyroid extracts, a dry powder rather than a liquid, the term might make somewhat more sense.

Some liquid extracts were still available at least as late as 1933. So the distinction between dry and liquid was important for many years.

The Chemist and Druggist

A glycerine and water extract of selected Thyroid glands obtained from healthy sheep.

<https://archive.org/details/b19974760M2903/page/n75/mode/2up?q=natural+desiccated+thyroid>

These desiccated thyroid extracts started out having their potency expressed in terms of raw thyroid gland. Either a weight of thyroid gland, or a number of glands such as a half or a whole gland. (One grain of desiccated thyroid might be claimed equal to five grams of raw thyroid.)

Over time, this became a very obvious problem.

Thyroid USP, the ingredient consisting of powdered thyroid glands rather than any product, was added to the United States Pharmacopoeia in 1906.

Thyroid, BP was added to the British Pharmacopoeia in 1932. Unlike the USA, this was a standard for the final tablets - not the ingredient. From then on, not only was it recognised but there was a formal assessment of potency.

Desiccated Thyroid from British Pharmacopoeia 1932

THYROIDEUM

[Thyroid.]

Thyroid

CAUTION.—In any part of the British Empire in which Thyroid is controlled by law, care must be taken that the provisions of such law are duly complied with. (See page 12.)

Synonyms. Thyroideum Siccum: Dry Thyroid: Thyroid Extract: Thyroid Gland.

Thyroid is prepared from the thyroid gland of oxen, sheep, or pigs. It contains 0.1 per cent. of iodine in combination as thyroxine (limits, 0.09 to 0.11), and not more inorganic iodine than 10 per cent. of the content of total iodine.

Remove the connective tissue and external fat from the thyroid glands. Dry the glands at a temperature not greater than 60°; powder; remove all fat by extraction with *light petroleum* (boiling-point, 50° to 60°), and dry the residue. Determine the proportion of iodine in combination as thyroxine, and mix the residue with a sufficient quantity of Lactose to produce a powder of the required strength.

THYROIDEUM

[Thyroid.]

Thyroid

CAUTION.—In any part of the British Empire in which Thyroid is controlled by law, care must be taken that the provisions of such law are duly complied with. (See page 12.)

Synonyms. Thyroideum Siccum: Dry Thyroid: Thyroid Extract: Thyroid Gland.

Thyroid is prepared from the thyroid gland of oxen, sheep, or pigs. It contains 0.1 per cent. of iodine in combination as thyroxine (limits, 0.09 to 0.11), and not more inorganic iodine than 10 per cent. of the content of total iodine.

Remove the connective tissue and external fat from the thyroid glands. Dry the glands at a temperature not greater than 60°; powder; remove all fat by extraction with light petroleum (boiling-point, 50° to 60°), and dry the residue. Determine the proportion of iodine in combination as thyroxine, and mix the residue with a sufficient quantity of Lactose to produce a powder of the required strength.

Thyroid, BP products had a substantially different potency to products made with **Thyroid USP**. However, the actual basis of the measurements was so different that it is impossible to define an exact equivalent. For many years, both **Thyroid, BP** and **Thyroid USP** products were widely available which might well have resulted in prescribing and dispensing errors.

The standards for both **Thyroid USP** and **Thyroid BP** did change over the years. For many years, the basis for assay has been very similar to that for synthetic thyroid hormone products and measures the amounts of levothyroxine (T4) and liothyronine (triiodothyronine/T3).

The current official **Thyroid USP** monograph is not readily accessible. The link below claims to be the version from 2007 but this cannot be verified.

http://pharmacopeia.cn/v29240/usp29nf24s0_m83400.html

Furthermore, the **Thyroid USP** standard has been adopted across all countries which have any form of desiccated thyroid.

Thyroid, BP was deleted from the British Pharmacopoeia as described in my blog:

helvella - The End of Thyroid BP

A brief note of one public statement about the final withdrawal of the UK product, Thyroid, BP. I suspect it summarises the attitude of the time.

<https://helvella.blogspot.com/p/helvella-end-of-thyroid-bp.html>

The term Desiccated Thyroid Extract (DTE) became, and largely remains, the standard name used within medicine.

Natural Desiccated Thyroid (NDT)

The oldest use of the term natural desiccated thyroid that I could find in the Internet Archive is from 1943.

In this case it is used in contradistinction to an upcoming synthetic product. But it is an isolated reference and does not imply the term was widely used.

As indicated earlier in this article, thyroid tissue has been used for many years by doctors for treatment of the thyroid deficiencies. While it could be used similarly for cattle its cost is so great that only in the case of very valuable stock could one use it. To obtain a cheaper substitute, Dr. E. P. Reineke and the writer became interested in the possibilities of producing a synthetic thyroprotein which could be substituted for the natural product. As a result of several years of research this has been accomplished. Milk protein-casein is combined with iodine in a certain way to form a thyroactive indocasein which has more than four times the activity of natural desiccated thyroid. It is now being manufactured in small amounts for use in experimental work but commercial production will get under way by next fall.

Guernsey Breeder's Journal 1943-05-01: Vol 63 Iss 9

https://archive.org/details/sim_guernsey-breeders-journal_1943-05-01_63_9/page/712/mode/2up?q=%22natural+desiccated+thyroid%22

Of course, a more comprehensive search would undoubtedly find more occurrences.

The term **natural desiccated thyroid** only really gained ground from 1984 onward. It appears to have been the book **Solved, the riddle of illness** by Langer, Stephen E; Scheer, James F which propelled its widespread use.

Reported results confirmed my suspicions: all were indeed hypothyroid. The treatment — natural desiccated thyroid supplement— brought gratifying results: freedom from their ailments in less than two months. Eloise was ecstatic about painless menstruation and normal body temperature. Appreciative husbands of Connie and Allison told me that thyroid had saved their sex life and marriage. Phil went even further. He said, "It saved my whole life."

<https://archive.org/details/solvedriddleofil00lang/page/2/mode/2up?q=%22natural+desiccated+thyroid%22>

In EuropePMC/PubMed the earliest use of the term natural desiccated thyroid was as late as 1989. In this case, the word natural was in quotes.

'Natural' desiccated thyroid. A 'health-food' thyroid preparation.

<https://europepmc.org/article/MED/2774788>

You might also find the occasional use of phrasing such as *natural desiccated* in specific circumstances.

... The preparations which have been most extensively used are the milk, either natural desiccated, from thyroidectomized animals, the antithyroidin of Moebius, the thyroidectin, i.e., the desiccated blood of thyroidectomized sheep, and very recently a serum prepared by Rogers and Beebe by the use of the nucleoproteid and thyroglobulin from normal and pathologic glands.

The Journal of the American Medical Association 1907-10-12: Vol 49 Iss 15

https://archive.org/details/sim_jama_1907-10-12_49_15/page/1240/mode/2up?q=natural+desiccated+thyroid

Thyroid USP Definition

Nowadays, **Thyroid USP** (U.S. Pharmacopeia), as defined in the USA, is pretty much the universal standard for that ingredient. This defines the specific requirements for T4 and T3 content, what additional ingredients are allowed (e.g. sugar and lactose), biological safety, etc.

The **Thyroid USP** standard allows a number of substances to be used as diluents to achieve the required potency. Although in small quantities, this might not be acceptable to some.

An old release of the **Thyroid USP** monograph stated:

It may contain a suitable diluent such as Lactose, Sodium Chloride, Starch, Sucrose, or Dextrose.

This is not always obvious from the Patient Information Leaflets.

Ingredients are not listed in this document as there are links to the formal documentation for the products and those should be definitive.

Thus some **Thyroid USP** ingredient might contain lactose, but others might not. You can only tell by checking which could involve contacting the manufacturer.

We take this claim at face value even if the country of origin of the **Thyroid USP**, or the final product, does not officially recognise the **Thyroid USP** standard.

The dosage of **Thyroid USP** tablets was originally based on the apothecary's measurement called a grain. When products changed from being a grain to a

milligram-based dosage, some ensured they had the same potency. Some adjusted the potency - e.g. down to 60/65. Therefore we have a small range of potencies and it is important to allow for this if when changing product. (The exact conversion of one grain is 64.79891 milligrams which is very close to 65.)

The potency of products made from **Thyroid USP** typically claim 38 micrograms of T4 and 9 micrograms of T3 per grain, or per 60 or 65 milligrams. See details in [Desiccated Thyroid Ratios](#).

Discussion

In my view, both terms are unsatisfactory. Indeed, even having two terms - one used primarily by patients and marketeers, the other by the medical and scientific establishments - is unsatisfactory.

Desiccated thyroid extract implies an extractive process which I question. The word “extract” adds little or nothing to the meaning.

Natural desiccated thyroid implies not just a distinction from the synthetic forms, but by being “natural” that makes it a better treatment. Though how well the word natural describes the products, which are substantially processed and have additional ingredients, probably depends on the view of the individual. In the end, the word “natural” adds little or nothing to the meaning. There is no “synthetic desiccated thyroid” which might require this distinction.

I prefer to use the simplest term, just **desiccated thyroid**, adding qualifiers as needed. For example, it is reasonable to identify standardisation of potency such as being manufactured to **Thyroid USP** standards. And special properties like being lactose-free. As well as the form - tablet or capsule.

Glandulars

In addition to the two terms for desiccated thyroid, there are numerous products which avoid claiming that they have any hormone content.

On the Thyroid UK forum, the term Natural Desiccated Thyroid (NDT) is often used for products which have a declared thyroid hormone content. What the medical establishment often call Desiccated Thyroid Extract (DTE). Such products almost always require some form of government approval. They are products which could be prescribed, at least in some countries.

If a product is made from desiccated thyroid but does not declare its potency, I call it a thyroid glandular. They are labelled with all sorts of descriptors - Raw Thyroid, Thyroid Glandular, some sort of thyroid support (many don't contain any thyroid, some do), or many others.

I would do this even if it is claimed to contain **Thyroid USP** as an ingredient. After all, the processing into tablets or capsules also needs to be done properly, and if a company is unwilling to state the potency of their final product, or includes other unknown ingredients, we cannot be confident.

By adopting this convention, I maintain consistency of meaning, enabling us to discuss products of known potency without having to explain each time. We also need a term for products of uncertain potency. And we use "thyroid glandulars" to emphasise that any possible thyroid hormone content is uncertain and could well be inconsistent tablet to tablet as well as batch to batch.

The producers listed are all those I have been able to find with even minimal information available. There could well be many others.

Many thyroid glandular vendors advise you take them alongside any prescribed thyroid medication (e.g. levothyroxine, desiccated thyroid, liothyronine or any combination.) Which implies that they did not contain any thyroid hormones.

At the same time, they often refer to increases in thyroid hormone levels, especially T3.

This leaves a conflicted picture and little to no explanation as to why thyroid glandulars should be taken at all. (Obviously, additional non-thyroid ingredients will have whatever effect they have.) But clearly they are NOT claiming you can take thyroid glandulars as an alternative, as a replacement, for any thyroid hormone medication. Yet that seems to be what many people think is the case.

❖ No Hormones! No Thyroxine!

Claims such as these can often be found in promotional materials for glandulars. They are confusing.

One meaning of "no hormones" is that they are produced from animals which have not had hormones injected (e.g. to enhance rate of growth).

We are not aware of any technique for removing T4 or T3, or both, from desiccated thyroid. If the product does contain any desiccated thyroid, it appears that it probably contains some thyroid hormones. Claims such as "no thyroxine" appear to be aimed at regulators, customs, websites which control sales of prescription medicines, etc.

Bovine and Porcine

At present all **Thyroid USP** products are based on porcine thyroid. There are many advantages of porcine sources for large-scale manufacture including lack of seasonality.

Thus all bovine products must be glandulars. Bovine products, if they do contain any thyroid hormones, would have a higher T4 to T3 ratio.

At least one glandular product refers to being ovine.

Added Ingredients

Thyroid glandulars will often contain additional ingredients. Some of these might have significant effects of their own.

Note that ingredients sometimes vary depending on where and when you check. It is unclear whether it is the products changing, or the information about them. In any case, it is important that you check specifically with any possible supplier.

Possible additional ingredients include:

- ❖ Iodine
- ❖ Selenium
- ❖ Dulse
- ❖ Adrenal Gland
- ❖ Irish Moss
- ❖ L-Tyrosine
- ❖ Anterior Pituitary Gland
- ❖ Bladderwrack
- ❖ Spleen
- ❖ Thymus Gland
- ❖ 5'-Ribonucleotides

Untested

Some companies appear to positively choose not to test their ingredients (nor the final products) for T4 and T3 content. They imply that testing would undermine their ability to define their products as food supplements.

Consistency

When the manufacturer claims they are not testing, any claims of consistency, tablet to tablet or batch to batch, are difficult to support. You cannot know if you do not test.

Why take a thyroid glandular?

If a glandular really does have no thyroid hormone content, why would anyone take it?

There are many very general claims about them helping patients. But few, if any, meaningful suggestions or explanations of what good they might do.

If a glandular does have thyroid hormone content, that very much explains why someone would take them. But we have the difficulties of consistency and dosing an uncertain product.

Changing Thyroid Glandular Makes

There are many glandulars on the market. And many make very similar claims. But without the details, it is impossible to be sure that one could substitute another at the same dose.

In particular, the wide range of additional ingredients make it difficult to be sure that changing makes will be satisfactory.

With desiccated thyroid, there is more likelihood of successfully changing, but many who have changed makes have found themselves having to make at least minor changes to doses.

Desiccated Thyroid Equivalence

How much more potent is liothyronine than levothyroxine?

It is important to understand how to consider the relative potency of liothyronine (T3) and levothyroxine (T4). Again, I have already written a blog on this very issue:

helvella - How much more potent is T3?

A discussion about the relative potency of T4 and T3.

<https://helvella.blogspot.com/p/helvella-how-much-more-potent-is-t3.html>

The table in the current document has used three values - three, four and five times as potent as T4 - to *illustrate* the effects of changes to the apparent potency of T3 in terms of T4 equivalence.

Hormone Content

Desiccated thyroid is almost universally manufactured using desiccated thyroid powder made to a standard called **Thyroid USP** -wherever it is manufactured. (USP stands for United States Pharmacopeia.)

Thyroid USP requires that the powder contains 38 micrograms of thyroxine (T4) and 9 micrograms of triiodothyronine (T3) per grain.

Note the change between *milligrams* for **Thyroid USP** content (above) and *micrograms* for actual hormone content (below). Only around one thousandth of a desiccated thyroid tablet is actually thyroid hormone.

One grain is usually assumed to be 60 milligrams but occasionally you will see 65 milligrams being used.

Taking one grain as equal to 60 milligrams (note, that is the weight of the **Thyroid USP** powder - not the hormone content), and using three different T3 equivalences, we see the calculated T4 equivalences in the table below.

Actual tablets will weight more as they contain excipients as well as **Thyroid USP**.

“Official” equivalence tables which have been published by manufacturers and others come to a different value. That value is also in the table below. Two examples of conversion table published by desiccated thyroid manufacturers:

NP Thyroid

<https://npthyroid.com/wp-content/uploads/2024/08/NPT-Conversion-Chart-2283-v1-web.pdf>

Adthyza

https://adthyza.com/wp-content/uploads/2023/09/ADTHYZA_Dosing_Conversion_Chart.pdf

Thyroid USP Hormone Equivalence Content

Thyroid USP milligrams	Thyroid USP grains	T4 content micrograms	T3 content micrograms	Calculated T4 equivalence micrograms	Official equivalence
The following rows are based on T3 being <u>three</u> times as potent as T4.					
30	½	19	4.5	32.5	50
60	1	38	9	65	100
90	1½	57	13.5	97.5	150
120	2	76	18	130	200
The following rows are based on T3 being <u>four</u> times as potent as T4.					
30	½	19	4.5	37	50
60	1	38	9	74	100
90	1½	57	13.5	111	150
120	2	76	18	148	200
The following rows are based on T3 being <u>five</u> times as potent as T4.					
30	½	19	4.5	41.5	50
60	1	38	9	83	100
90	1½	57	13.5	124.5	150
120	2	76	18	166	200

Converting doses between levothyroxine and desiccated thyroid, using the ‘official’ numbers, gives a rather unbalanced result. For example:

*Converting from 100 micrograms of levothyroxine to one grain of desiccated thyroid would likely **under-dose**.*

*Converting from one grain of desiccated thyroid to 100 micrograms of levothyroxine would likely **over-dose**.*

It is not possible to use a formula to find an equivalence which works for all people. There are many reasons that such approaches will not, indeed, cannot work. For example, absorption of T4 varies from one person to the next, and even from one formulation of T4 to another. And some people seem to find the effect of desiccated thyroid is not the same as a formula appears to predict. Also, different products - both levothyroxine and desiccated thyroid - themselves vary.

This table simply shows the results of such a formulaic approach. It is not intended to endorse the approach.

Details of all known products are listed in [Desiccated Thyroid Ratios](#).

Desiccated Thyroid H03AA05

This section lists all known desiccated thyroid products with declared thyroid hormone content. They are often called **Desiccated Thyroid Extract (DTE)** within medicine and pharmacy, or **Natural Desiccated Thyroid (NDT)** by patients.

The word "natural" is sometimes seen to be misleading as the actual products have gone through multiple processes and usually contain several additional ingredients.

These are subject to some regulation and oversight in the country within which they are marketed. However, they might be regulated like supplements rather than approved. (This is currently the case in the USA.) This will, in general, not be applicable in any other countries. However, there will be cases where there is some acceptance - for example, when personally importing Erfa from Canada to USA, or Armour from USA to Canada.

In addition to these products, some countries have pharmacies which will prepare similar tablets or capsules to order using Thyroid USP powder. This has been stopped by the FDA in the USA.

Some products, notably in the USA, may be repackaged under other packager names. As the product is identical, these have been ignored.

Thyroid Hormone Content

Where known, T4 and T3 contents are shown. The amounts are sometimes shown per 60 milligrams, sometimes per 65 milligrams. And doses other than one grain (or nearest) need to be scaled - for some products the scaled numbers show some rounding.

The potency of the product might be a little confusing due to the names used.

The manufacturers sometimes uses the word "levothyroxine" for ALL T4 - tetraiodothyronine.

Similarly, the manufacturers sometimes use the word "liothyronine" for ALL T3 - triiodothyronine.

Synthetic T4 is "levothyroxine sodium" or, in one full version of its chemical name, "3,3',5,5'-Tetraiodo-L-thyronine sodium".

Synthetic T3 is "liothyronine sodium" or, in the case of Thybon Henning, "liothyronine hydrochloride" or, in one full chemical version of its name, "3,3',5-Triiodo-L-thyronine sodium".

Other than the sodium (or hydrochloride), the synthetic versions are chemically identical to what thyroid glands, human and animal, produce.

While the words levothyroxine and liothyronine might initially appear to suggest the synthetic versions of the hormones, the intention is to use the same names for the actual hormones as are used for the synthetic products in order to try to AVOID confusion. Using their full chemical names would likely be even more confusing.

This would tend to help if anyone is trying to compare a dose of desiccated thyroid with doses of synthetic thyroid hormones. (They are not entirely equivalent but can give some idea of likely doses.)

The "levo" prefix has the same meaning as "-L-" in the full chemical names. It distinguishes it from the "dextro" forms which behave differently. It does not imply where the substance was produced - in a thyroid gland or a chemical factory. Despite common use of the short slang "levo" to mean levothyroxine sodium.

Matrix of Desiccated Thyroid Products - Current

All currently marketed products/dosages are listed as grains. The precise milligram measures vary by make. All the dosages are actually based on traditional grain measures but converted (approximately) to milligrams.

1/4 grain	1/2 grain	1 grain	1 1/2 grain	2 grain	3 grain	4 grain	5 grain
Abbvie - Armour Thyroid							
<p>CALCIUM STEARATE (UNII: 776XM7047L) DEXTROSE, UNSPECIFIED FORM (UNII: IY9XDZ35W2) CELLULOSE, MICROCRYSTALLINE (UNII: OP1R32D61U) SODIUM STARCH GLYCOLATE TYPE A (UNII: H8AV0SQX4D) CALCIUM STEARATE (UNII: 776XM7047L) Opadry White</p>							
✓	✓	✓	✓	✓	✓	✓	✓
Acella - NP Thyroid							
<p>CALCIUM STEARATE (UNII: 776XM7047L) DEXTROSE MONOHYDRATE (UNII: LX22YL083G) MINERAL OIL (UNII: T5L8T28FGP) Contains no ingredient made from a gluten-containing grain (wheat, barley, rye).</p>							
✓	✓	✓	✓	✓			
ANI - Thyroid USP							
<p>silicon dioxide (UNII: ETJ7Z6XBU4) microcrystalline cellulose 112 (UNII: X7XJ6RM9Q2) sodium starch glycolate type A (UNII: H8AV0SQX4D) calcium stearate (UNII: 776XM7047L) anhydrous dextrose (UNII: 5SL0G7R00K)</p>							
✓	✓	✓	✓	✓			
APur - Thyroid (thyroid tablets USP)							
<p>microcrystalline cellulose (UNII: OP1R32D61U) lactose, unspecified form (UNII: J2B2A4N98G) silicon dioxide (UNII: ETJ7Z6XBU4) magnesium stearate (UNII: 70097M6I30)</p>							
✓	✓	✓	✓	✓			
Azurity - Adthyzia Thyroid							

¼ grain	½ grain	1 grain	1½ grain	2 grain	3 grain	4 grain	5 grain
<i>calcium stearate (UNII: 776XM7047L)</i> <i>SILICON DIOXIDE (UNII: ETJ7Z6XBU4)</i> <i>DEXTROSE, UNSPECIFIED FORM (UNII: IY9XDZ35W2)</i> <i>mannitol (UNII: 3OWL53L36A)</i> <i>microcrystalline cellulose (UNII: OP1R32D61U)</i> <i>SODIUM STARCH GLYCOLATE TYPE A (UNII: H8AV0SQX4D)</i>							
✓	✓	✓	✓	✓			
Erfa - Thyroid by Erfa							
<i>cornstarch, magnesium stearate, sugar and talc</i>							
	✓	✓		✓			
Kachhela - Shytomel Duo							
<i>No official list of excipients is available but company has advised they are uncoated and contain starch and dicalcium phosphate.</i>							
		✓					
LGM thyroid tablets, USP							
<i>microcrystalline cellulose (UNII: OP1R32D61U)</i> <i>lactose, unspecified form (UNII: J2B2A4N98G)</i> <i>silicon dioxide (UNII: ETJ7Z6XBU4)</i> <i>magnesium stearate (UNII: 70097M6I30)</i>							
✓	✓	✓	✓	✓			
Niva - Thyroid							
<i>ANHYDROUS DEXTROSE (UNII: 5SLOG7R0OK)</i> <i>CELLULOSE, MICROCRYSTALLINE (UNII: OP1R32D61U)</i> <i>SODIUM STARCH GLYCOLATE TYPE A (UNII: H8AV0SQX4D)</i> <i>POVIDONE K30 (UNII: U725QWY32X)</i> <i>CALCIUM STEARATE (UNII: 776XM7047L)</i>							
✓	✓	✓	✓	✓	✓	✓	✓
Sriprasit - Thyroid S							
<i>Sriprasit do not publish the list of ingredients/excipients. Informally supplied information is inconsistent and many years old.</i>							
		✓					

Matrix of Desiccated Thyroid Products - Non-current

This includes some products which are no longer produced. Any new products which have not yet reached market would also be included.

¼ grain	½ grain	1 grain	1½ grain	2 grain	3 grain	4 grain	5 grain
<u>Greater Pharma - Thyroid †</u>							
		✓					
<u>RLC - Nature-Throid † (also ¾, 1¼, 1¾, 2¼, 2½)</u>							
✓	✓	✓	✓	✓	✓	✓	✓
<u>RLC - WP Thyroid † (also ¾, 1¼, 1¾, 2¼, 2½)</u>							
✓	✓	✓	✓	✓	✓		
<u>T.MAN - TR Thyroid †</u>							
		✓					

Desiccated Thyroid Ratios

Most desiccated thyroid tablets have similar quantities of T4 and T3, and in similar ratios. However, there is some variation which might be sufficient to need a small adjustment of dose. The quantities are in micrograms per grain. (Grains vary between 60 and 65 milligrams depending on product.)

Product/dosage/ company	T4 micrograms	T3 micrograms	Weight ratio	Molar ratio
Adthyza Thyroid (65 mg) <i>Azurity</i>	38	9	4.22:1	3.44:1
ANI Thyroid (60 mg)	38	9	4.22:1	3.44:1
APur (60 mg)	38	9	4.22:1	3.44:1
Armour Thyroid (60 mg) <i>Allergan</i>	38	9	4.22:1	3.44:1
Biofac Thyroid USP API (per 60 mg) ‡	n/a	n/a		
Bioiberica Thyroid API (per 60 mg) ‡	34.2 – 41.8 (35)	8.1 – 9.9 (9)	4.22:1	3.44:1
Erfa Thyroid (60 mg) <i>Erfa</i>	35	8	4.38:1	3.57:1
Kachhela Shytomel Duo (47 microgram)	19	8	4.22:1	3.44:1
LGM Thyroid USP (60 mg)	19	8	4.22:1	3.44:1
Nature-Throid (65 mg) <i>RLC</i> †	38	9	4.22:1	3.44:1
Niva (60 mg)	38	9	4.22:1	3.44:1
NP Thyroid (60 mg) <i>Acella</i>	38	9	4.22:1	3.44:1
Thiroyd (60 mg) <i>Greater Pharma</i>	35	8.31	4.21:1	3.43:1
† §				

Product/dosage/ company	T4 micrograms	T3 micrograms	Weight ratio	Molar ratio
Thyroid S (60 mg) <i>Sriprasit</i> §	38	9	4.22:1	3.44:1
TMAN T.R., (60 mg) <i>T.Man Pharma</i> † §	38	9	4.22:1	3.44:1
Westroid Pure/WP Thyroid (65 mg) <i>RLC</i> †	38	9	4.22:1	3.44:1

† Some of these products are no longer available, either permanently, or on long-term recall, but they are retained for reference.

§ These figures are as claimed by the manufacturers and have not been independently verified.

‡ Product is produced as an Active Pharmaceutical Ingredient (API) for other manufacturers and is only sold in bulk to Germany, Netherlands, Denmark and possibly elsewhere. Included for interest/completeness.

<https://biofac.dk/human-health/thyroid-health/thyroid-usp-gmp/>

<https://www.bioiberica.com/en>

❖ AbbVie - Armour Thyroid

Marketing Authorisation Holder and Manufacturer **AbbVie**, United States 

1 Grain (60 mg) contains levothyroxine (T4) 38 micrograms liothyronine (T3) 9 micrograms.

Excipients
<p><i>CALCIUM STEARATE (UNII: 776XM7047L)</i> <i>DEXTROSE, UNSPECIFIED FORM (UNII: IY9XDZ35W2)</i> <i>CELLULOSE, MICROCRYSTALLINE (UNII: OP1R32D61U)</i> <i>SODIUM STARCH GLYCOLATE TYPE A (UNII: H8AV0SQX4D)</i> <i>CALCIUM STEARATE (UNII: 776XM7047L)</i> <i>Opadry White</i></p>

Dosage **15 milligram (¼ grain)**

Side 1	Side 2					
A TC	○	5mm				Round

PL/MAH NDC 0456-0457-01

Dosage **30 milligram (½ grain)**

Side 1	Side 2					
A TD	○	6mm				Round

PL/MAH NDC 0456-0458-01

Dosage **60 milligram (1 grain)**

Side 1	Side 2					
A TE	○	7mm				Round

PL/MAH

NDC 0456-0459-01

Dosage 90 milligram (1½ grain)

Side 1	Side 2					
A TJ	○	9mm			Round	

PL/MAH

NDC 0456-0460-01

Dosage 120 milligram (2 grain)

Side 1	Side 2					
A TF	○	10mm			Round	

PL/MAH

NDC 0456-0461-01

Dosage 180 milligram (3 grain)

Side 1	Side 2					
A TG	○	10mm			Round	

PL/MAH

NDC 0456-0462-01

Dosage 240 milligram (4 grain)

Side 1	Side 2					
A TH	○	11mm			Round	

PL/MAH

NDC 0456-0463-01

Dosage 300 milligram (5 grain)

Side 1	Side 2					
A TI	○	13mm			Round	

PL/MAH NDC 0456-0464-01

All dosages

AbbVie PIL https://www.rxabbvie.com/pdf/armour_thyroid_pi.pdf

FDA PIL <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=56b41079-60db-4256-9695-202b3a65d13d&audience=consumer>

FDA SPC <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=56b41079-60db-4256-9695-202b3a65d13d>

Brand History

1893	Earliest Armour dried thyroid offered to physicians
1914	Armour and Company launch Armour Thyroid
1970	Greyhound takes over Armour and Company
1978	Revlon takes over Armour Pharmaceuticals
1985	Rorer (later Rhône-Poulenc Rorer) takes over Revlon drugs unit
1991	Forest takes over Armour Thyroid
20/10/1993	Recall - packaging issues
11/05/2005	Recall due to sub potency
2011	Recall - labelling issues
01/07/2014	Actavis takes over Forest
2015	Actavis becomes Allergan after complex renaming and acquisition
05/2020	AbbVie takes over Allergan

❖ Acella - NP Thyroid

Marketing Authorisation Holder and Manufacturer **Acella**, United States 

60 milligrams (one grain) contains levothyroxine (T4) 38 micrograms and liothyronine (T3) 9 micrograms.

 Lactose content: Quantity not known.

Excipients

*CALCIUM STEARATE (UNII: 776XM7047L)
DEXTROSE MONOHYDRATE (UNII: LX22YL083G)
MINERAL OIL (UNII: T5L8T28FGP)
Contains no ingredient made from a gluten-containing grain (wheat, barley, rye).*

Dosage **15 milligram**

Side 1	Side 2					
AP	327	6mm			Oval	

PL/MAH NDC 42192-327-01

FDA PIL <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=a3ff93ad-86ed-4324-ae86-7e7ed3a49db8&audience=consumer>

FDA SPC <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=a3ff93ad-86ed-4324-ae86-7e7ed3a49db8>

Dosage **30 milligram**

Side 1	Side 2					
AP	329	5mm			Round	

PL/MAH NDC 42192-329-01

FDA PIL <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=2eabc9b4-2d5c-44b2-bf05-eb6c3260c1bd&audience=consumer>

FDA SPC

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=2eabc9b4-2d5c-44b2-bf05-eb6c3260c1bd&audience=professional>

Dosage 60 milligram

Side 1	Side 2					
AP	330	6mm			Round	

PL/MAH

NDC 42192-330-01

FDA PIL

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f347f490-7199-4de6-bca2-0d44a74979af&audience=consumer>

FDA SPC

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f347f490-7199-4de6-bca2-0d44a74979af>

Dosage 90 milligram

Side 1	Side 2					
AP	331	8mm			Round	

PL/MAH

NDC 42192-331-01

FDA PIL

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=dac99035-9098-4710-bf55-c46889ffc282&audience=consumer>

FDA SPC

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=dac99035-9098-4710-bf55-c46889ffc282>

Dosage 120 milligram

Side 1	Side 2					
AP 328	○	8mm			Round	

PL/MAH

NDC 42192-328-01

FDA PIL

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=00046231-8fab-44a0-b986-9a9dd450881d&audience=consumer>

Brand History

11/11/2010	First FDA approval 60
14/01/2011	First FDA approval 30
03/02/2011	First FDA approval 90
16/11/2016	First FDA approval 15
12/06/2017	First FDA approval 120
22/05/2020	FDA recall (some batches)
17/09/2020	FDA recall (some batches)
30/04/2021	FDA recall (some batches)

❖ ANI - Thyroid USP

Marketing Authorisation Holder and Manufacturer **ANI**, United States 

60 mg (one grain) contains levothyroxine (T4) 38 micrograms liothyronine (T3) 9 micrograms

Excipients
<i>silicon dioxide (UNII: ETJ7Z6XBU4)</i>
<i>microcrystalline cellulose 112 (UNII: X7XJ6RM9Q2)</i>
<i>sodium starch glycolate type A (UNII: H8AV0SQX4D)</i>
<i>calcium stearate (UNII: 776XM7047L)</i>
<i>anhydrous dextrose (UNII: 5SLOG7R0OK)</i>

Dosage 15 milligram

Side 1	Side 2					
N 740	○	8mm			Oval	Tan

PL/MAH NDC 62559-740-01

Dosage 30 milligram

Side 1	Side 2					
N 741	○	6mm			Round	Tan

PL/MAH NDC 62559-741-01

Dosage 60 milligram

Side 1	Side 2					
N 742	○	7mm			Round	Tan

PL/MAH NDC 62559-742-01

Dosage 90 milligram

Side 1	Side 2					
N 743	○	9mm			Round	Tan

PL/MAH NDC 62559-743-01

Dosage 120 milligram

Side 1	Side 2					
N 744	○	10mm			Round	Tan

PL/MAH NDC 62559-744-01

All Dosages

FDA PIL <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=9b517204-3d73-410f-aa86-741f29e51906&audience=consumer>

FDA SPC <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=9b517204-3d73-410f-aa86-741f29e51906>

Brand History

17/03/2024 Added to this document

❖ APur - Thyroid (thyroid tablets, USP)

Marketing Authorisation Holder and Manufacturer **Vitruvias**, United States 

60 mg (one grain) contains levothyroxine (T4) 38 micrograms liothyronine (T3) 9 micrograms

 Lactose content: Quantity not known.

This appears to be identical to LGM thyroid tablets, USP but is not shown to be a repackaged product.

Excipients

microcrystalline cellulose (UNII: OP1R32D61U)
lactose, unspecified form (UNII: J2B2A4N98G)
silicon dioxide (UNII: ETJ7Z6XBU4)
magnesium stearate (UNII: 70097M6I30)

Dosage 15 milligram

Side 1	Side 2					
THY 025	○	5mm			Oval	Tan

PL/MAH NDC 69680-149-00

Dosage 30 milligram

Side 1	Side 2					
THY 050	○	6mm			Round	Tan

PL/MAH NDC 69680-150-00

Dosage 60 milligram

Side 1	Side 2					
THY 100	○	7mm			Round	Tan

PL/MAH NDC 69680-151-00

Dosage 90 milligram

Side 1	Side 2					
THY 150	○	9mm			Round	Tan

PL/MAH NDC 69680-152-00

Dosage 120 milligram

Side 1	Side 2					
THY 200	○	10mm			Round	Tan

PL/MAH NDC 69680-153-00

All dosages

FDA PIL <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=a912e127-c0a5-482c-b06c-b657c433c6d9&audience=consumer>

FDA SPC <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=a912e127-c0a5-482c-b06c-b657c433c6d9>

Brand History

18/03/2024 Added to this document

❖ Azurity - Adthyza Thyroid

Marketing Authorisation Holder and Manufacturer **Azurity**, United States 

65 milligrams (one grain) contains 38 micrograms of T4 and 9 micrograms of T3.

 Lactose content: Quantity not known.

Excipients
<i>calcium stearate (UNII: 776XM7047L)</i>
<i>SILICON DIOXIDE (UNII: ETJ7Z6XBU4)</i>
<i>DEXTROSE, UNSPECIFIED FORM (UNII: IY9XDZ35W2)</i>
<i>mannitol (UNII: 3OWL53L36A)</i>
<i>microcrystalline cellulose (UNII: OP1R32D61U)</i>
<i>SODIUM STARCH GLYCOLATE TYPE A (UNII: H8AV0SQX4D)</i>

Dosage **16.25 milligram**

Side 1	Side 2					
16	○	4mm			Round	

PL/MAH NDC 24338-016-14 & 24338-016-90

Dosage **32.5 milligram**

Side 1	Side 2					
32	○	6mm			Round	

PL/MAH NDC 24338-032-14 & 24338-032-90

Dosage **65 milligram**

Side 1	Side 2					
65	○	7mm			Round	

PL/MAH

NDC 24338-065-14 & 24338-065-90

Dosage

97.5 milligram

Side 1	Side 2					
97	○	8mm			Round	

PL/MAH

NDC 24338-097-14 & 24338-097-90

Dosage

130 milligram

Side 1	Side 2					
130	○	9mm			Round	

PL/MAH

NDC 24338-113-14 & 24338-113-90

All dosages

FDA PIL

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=90737b49-1079-46f3-a26e-0119c273b53f&audience=consumer>

FDA SPC

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=90737b49-1079-46f3-a26e-0119c273b53f>

Brand History

20/02/2023 First FDA approval

❖ Erfa - Thyroid by Erfa

Marketing Authorisation Holder **Erfa**, Canada , Manufacturer not known.

60 milligrams (one grain) contains 35 micrograms of T4 and 8 micrograms of T3.

(This is widely stated but does not appear on Erfa's own website.)



Lactose content: Quantity not known.

Excipients

cornstarch, magnesium stearate, sugar and talc

Dosage 30 milligram

Side 1	Side 2					
ECI 30	○	mm	mm	mg		

PL/MAH C32792 DIN 00023949

Dosage 60 milligram

Side 1	Side 2					
ECI 60	○					

PL/MAH C32982 DIN 00023957

Dosage 125 milligram

Side 1	Side 2					
ECI 125	○					

PL/MAH C32992 DIN 00023965

All dosages

Erfa SPC

<https://searchlightpharma.com/wp-content/uploads/2023/10/Thyroid-PM-ENG-Oct2022.pdf>

Health Canada SPC

https://pdf.hres.ca/dpd_pm/00056576.PDF

Brand History

Originally Park, Davis, Canada

05/2004 Erfa acquired product from Park, Davis

2012 Erfa acquired by Searchlight Pharma

20/05/2020 Health Canada approved monograph (SPC)

❖ Greater Pharma - Thyrod †

Marketing Authorisation Holder and Manufacturer [Greater Pharma](#), Thailand



Lactose content: Quantity not known.

No longer produced.

Brand History

09/2018 Product ceased production

❖ Kachhela Shytomel Duo

Distributor [Kachhela](#) Medex, India 

60 milligrams (one grain) contains 38 micrograms of T4 and 9 micrograms of T3.

This appears to be quite a new product from a wholesaler/distributor with no details of manufacturer known.

!! Further information strongly implies that while it is promoted as Thyroid Tablets USP, it is actually a combination of synthetic levothyroxine and liothyronine. **!!**

Dosage 47 microgram

The company oddly describes this as a 47 microgram product which is the sum of the T4 and T3 content in micrograms.

Side 1	Side 2					

Brand History

❖ LGM - thyroid tablets, USP

Marketing Authorisation Holder and Manufacturer **LGM**, United States 

60 mg (one grain) contains levothyroxine (T4) 38 micrograms liothyronine (T3) 9 micrograms

 Lactose content: Quantity not known.

This appears to be identical to APur Thyroid but is not shown to be a repackaged product.

Excipients

microcrystalline cellulose (UNII: OP1R32D61U)
lactose, unspecified form (UNII: J2B2A4N98G)
silicon dioxide (UNII: ETJ7Z6XBU4)
magnesium stearate (UNII: 70097M6I30)

Dosage 15 milligram

Side 1	Side 2					
THY 025	○	5mm			Oval	Tan

PL/MAH NDC 79739-7370-1

Dosage 30 milligram

Side 1	Side 2					
THY 050	○	6mm			Round	Tan

PL/MAH NDC 79739-7371-1

Dosage 60 milligram

Side 1	Side 2					
THY 100	○	7mm			Round	Tan

PL/MAH NDC 79739-7372-1

Dosage 90 milligram

Side 1	Side 2					
THY 150	○	9mm			Round	Tan

PL/MAH NDC 79739-7373-1

Dosage 120 milligram

Side 1	Side 2					
THY 200	○	10mm			Round	Tan

PL/MAH NDC 79739-7374-1

All dosages

FDA PIL <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=5bdc43b8-04a1-4767-8489-bf3ee485a00c&audience=consumer>

FDA SPC <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=5bdc43b8-04a1-4767-8489-bf3ee485a00c>

Brand History

18/03/2024 Added to this document

❖ Niva - Thyroid

Marketing Authorisation Holder **Nivagen**, United States 

38 mcg levothyroxine (T4) and 9 mcg liothyronine (T3) per grain of thyroid

 Lactose content: Quantity not known.

Excipients

ANHYDROUS DEXTROSE (UNII: 5SLOG7R0OK)
CELLULOSE, MICROCRYSTALLINE (UNII: OP1R32D61U)
SODIUM STARCH GLYCOLATE TYPE A (UNII: H8AV0SQX4D)
POVIDONE K30 (UNII: U725QWY32X)
CALCIUM STEARATE (UNII: 776XM7047L)

Dosage 15 milligram (¼ grain)

Side 1	Side 2					
N	15	4mm	mm	mg	Round	

PL/MAH NDC 75834-310-01

Dosage 30 milligram (½ grain)

Side 1	Side 2					
N	30	6mm			Round	

PL/MAH NDC 75834-311-01

Dosage 60 milligram (1 grain)

Side 1	Side 2					
N	30	7mm			Round	

PL/MAH NDC 75834-312-01

Dosage 90 milligram (1½ grain)

Side 1	Side 2					
N	90	9mm			Round	

PL/MAH NDC 75834-313-01

Dosage 120 milligram (2 grain)

Side 1	Side 2					
N	120	10mm			Round	

PL/MAH NDC 75834-314-01

Dosage 180 milligram (3 grain)

Side 1	Side 2					
N —	180	10mm			Round	

PL/MAH NDC 75834-315-01

Dosage 240 milligram (4 grain)

Side 1	Side 2					
N	249	11mm			Round	

PL/MAH NDC 75834-316-01

Dosage 300 milligram (5 grain)

Side 1	Side 2					
N —	300	13mm			Round	

All dosages

FDA PIL

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=eae7789a-d85d-4b04-a680-e688a371ebee&audience=consumer>

FDA SPC

<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=eae7789a-d85d-4b04-a680-e688a371ebee&audience=professional>

Brand History

24/07/2023 FDA regulation commenced

❖ RLC - Nature-Throid †

Marketing Authorisation Holder and Manufacturer [RLC](#), United States 

Currently not available due to recall.



Lactose content: Quantity not known.

Brand History

1982	Nature-Throid introduced as a hypo-allergenic version of Westhroid
2005	Introduced by this date
31/08/2020	FDA Recall
03/09/2020	FDA Recall

❖ **RLC - WP-Thyroid †**
formerly Westhroid Pure

Marketing Authorisation Holder and Manufacturer **RLC**, United States 

Formerly Wes-Throid

Currently not available due to recall.

 Lactose content: Quantity not known.

Brand History

- 1934 Introduced as Westhroid (different formulation)
- 31/08/2020 FDA Recall
- 03/09/2020 FDA Recall

❖ Sriprasit - Thyroid S

Marketing Authorisation Holder and Manufacturer [Sriprasit](#), Thailand 

60 milligrams (one grain) contains 38 micrograms of T4 and 9 micrograms of T3.

Thyroid S Batches: A summary of known and suspected potency of Thyroid S batches.

<https://helvella.blogspot.com/p/thyroid-s-batches.html>



Lactose content: Quantity not known.

Excipients

Sriprasit do not publish the list of ingredients/excipients. Informally supplied information is inconsistent and many years old.

Dosage 60 milligram (approx. one grain)

Side 1	Side 2					
○	○			114mg	Round	

PL/MAH Thailand FDA No. 1A 100/2527

There is no accessible official documentation for Thyroid S.

Brand History

2005 Available

❖ T.MAN - TR Thyroid †

Marketing Authorisation Holder and Manufacturer **T.MAN**, Thailand 



Lactose content: Quantity not known.

No longer produced.

Brand History

2007	Mentioned in Martindales
04/2013	Product mentioned in UK
09/2018	Product ceased production

❖ Other brands and makes

Mentioned here are for historical interest only. They are no longer available.

Bio-Throid (Bio-Tech)

Cinetic

Parke, Davis (said to be 50% more potent than Thyroid USP)

Thyroid URL (Time-Cap Labs Inc)

Thyroglobulin (Proloid, Warner-Chilcott).

Westminster Thyroid Tablets USP

Details of Compounded Desiccated Thyroid capsules

A number of compounding pharmacies will produce capsules contain desiccated thyroid to order.

It is usual to have a choice of material used for the capsule and one or more excipients used to enable manufacture and filling of the product.

These pharmacies require prescriptions which are valid in the country within which they operate.

Compounding of desiccated thyroid products was stopped by the FDA in the USA due to concerns about the potency.

❖ CompoundLabs - Whole Thyroid Capsules

Compounded by [CompoundLabs](#), Auckland, New Zealand 



Lactose content: This product contains lactose.

Product Information:

<https://drive.google.com/file/d/1z4OGXJCcASH7hF65vULrdtjNlgD6VKUD/view>

Dosages 15mg, 30mg, 45mg,
60mg, 90mg, 120mg,
150mg, 180mg and 210mg.

Brand History

❖ De Natuur Apotheek - Thyreoïdum

Compounded by [De Natuur Apotheek](#), Netherlands 



Lactose content: Lactose status needs to be discussed when ordering.

Dosages by discussion.

Brand History

❖ Glostrup apotek - unnamed

Compounded by [Glostrup](#), Denmark 



Lactose content: Lactose status needs to be discussed when ordering.

Dosages by discussion.

Brand History

❖ Green Dispensary - unnamed

Compounded by Green Pharmacy, Australia 



Lactose content: Lactose status needs to be discussed when ordering.

Dosages by discussion.

Brand History

❖ Kloesterl Apotheke - Thyreogland

Compounded by [Kloesterl Apotheke](#), Germany 



Lactose content: Lactose status needs to be discussed when ordering.

Extra information in English <https://stofskiftesupport.dk/wp-content/uploads/2021/03/Thyreogland-Information-English.pdf>

Dosages by discussion.

Brand History

❖ Receptura - unnamed

Compounded by Receptura, Germany 🇩🇪



Lactose content: Lactose status needs to be discussed when ordering.

Dosages by discussion.

Brand History

❖ Roseway - Natural Desiccated Thyroid capsules

Compounded by [Roseway](#), United Kingdom 



Lactose content: Lactose status needs to be discussed when ordering.

Dosages by discussion.

Brand History

❖ Schlossplatz Apotheke - unnamed

Compounded by [Schlossplatz Apotheke](#), Germany 



Lactose content: Lactose status needs to be discussed when ordering.

Dosages by discussion.

Brand History

❖ Weltapotheke - unnamed

Compounded by [Weltapotheke](#), Austria 



Lactose content: Lactose status needs to be discussed when ordering.

Dosages by discussion.

Brand History

Thyroid Glandulars

What are thyroid glandulars?

Products made from dried and powdered animal thyroid, often bovine but sometimes porcine and even ovine, and with a variety of other ingredients. Unlike NDT/DTE, thyroid glandulars have no declared thyroid hormone content.

The manufacturers and retailers make a variety of claims ranging from “hormone-free, through “thyroxine-free” including “nothing removed”, which leave customers with little information on which to make decisions.

Many leave you to assume that they do contain some thyroid hormone.

One reason for these products to exist is that by making no claims about thyroid hormone content, they can be sold as food supplements without prescription.

Unless products declare a thyroid hormone content, we cannot be sure how much (if any) they contain. Nor whether any thyroid hormone content is consistent from tablet to tablet, batch to batch, or year to year. We also have no certainty about how any thyroid hormone content changes over time from manufacture to expiry.

Why include thyroid glandulars?

The main reason for including this document is that leaving them out would provide no information. Including them, without any recommendation, is intended to enable readers to check the name and status of these products.

The listing of a product **must not** be taken as an endorsement of the product, manufacturer or vendor.

Thyroid glandular product details

There is a tendency for companies to confuse between the country of origin of the thyroid ingredient, the country of manufacture and the country from which the companies operate.

Some of these products contain numerous other ingredients. Some of these have known effects. And some products show different ingredients depending where you see them despite apparently being the same product.

It is possible that some of these brand names are applied to the same product but distributed under different names. It is almost impossible to know.

Number of products

The number of thyroid glandular products is vast. This strongly suggests that their sale is a significant money-making business. Remember that, other than people seeking thyroid treatments, there is probably absolutely no market for animal thyroids, and there will actually be a cost for proper disposal as thyroid tissue should be rigorously excluded from the food chain.

Comparisons

It is effectively impossible to make useful comparisons among the various thyroid glandular products. Without having full details, we can only guess and discuss with others.

Notes

Dosages are shown in terms of claimed desiccated thyroid content. This varies from being the only active ingredient to being only a minor constituent.

The number of products suggests that they are very profitable to their vendors.

❖ Allergy Research Group - Thyroid Natural Glandular Capsules

Marketed by [Allergy Research Group](#), United States 

All identified ingredients:

- * Bovine thyroid from Australia and/or New Zealand.
- * Hydroxypropyl methylcellulose
- * microcrystalline cellulose
- * rice extract
- * rice hulls
- * gum arabic
- * sunflower oil.

Dosage 40 milligrams

Brand History

❖ American Biologics - Thyroid Glandular †

Marketed by [American Biologics](#), United States 

All identified ingredients:

- * Raw Thyroid Concentrate
- * Vitamin B-12 (as methylcobalamin)
- * Iodine
- * Zinc
- * Selenium
- * Copper
- * Manganese
- * Molybdenum
- * L-Tyrosine
- * Schizandra
- * Coleus Forskohlii
- * Kelp
- * Ashwagandha Root
- * Bladderwrack
- * Cayenne Pepper.

Dosage 130 milligrams

Brand History

❖ Ancestral - Grass Fed Beef Thyroid

Marketed by [Ancestral Supplements](#), United States 

Sourced from New Zealand and/or Australia

Claims no additional ingredients but includes 470 milligrams of beef liver.

Dosage 30 milligrams

Brand History

❖ Bio-Design - Thyroid Glandular Nutritional Support formerly Thyroid 130

Marketed by Bio-Design, United States 

Sourced from Argentina

- * Thyroid Tissue Powder
- * Vegetarian capsule
- * microcrystalline cellulose
- * vegetable calcium stearate

Dosage 130 milligrams

Brand History

❖ Biotics Research - GTA-Forte

Marketed by [Biotics Research](#), United States 

Be careful to note the differences between this and the similar GTA-Forte-II product.

† Containing Phytochemically Bound Trace Elements™, methyl compounds and/or naturally associated phytochemicals including polyphenolic compounds with SOD and catalase, dehydrated at low temperature to preserve associated enzyme factors. OOrganik-15™ vegetable culture†.

All identified ingredients:

- * Zinc (as zinc gluconate)
- * Selenium (from vegetable culture†)
- * Copper (as copper gluconate)
- * Rubidium (from vegetable culture†)
- * Porcine Glandular Concentrate
- * Superoxide Dismutase (from vegetable culture†)
- * Catalase (from vegetable culture†).
- * Gelatin shell
- * Magnesium stearate (vegetable source)

Dosage 20 milligram GTA-Forte

Brand History

❖ Biotics Research - GTA-Forte-II

Marketed by [Biotics Research](#), United States 

Be careful to note the differences between this and the similar GTA-Forte product.

GTA-Forte II™ contains one-fourth (1/4) the amount of copper of GTA-Forte™.

All identified ingredients:

- * Zinc (as zinc gluconate)
- * Selenium (from vegetable culture†)
- * Copper (as copper gluconate)
- * Rubidium (from vegetable culture†)
- * Porcine glandular concentrate
- * Superoxide Dismutase (from vegetable culture†)
- * Catalase (from vegetable culture†).
- * Gelatin shell
- * Magnesium stearate (vegetable source)

Dosage 20 milligram GTA-Forte II

Brand History

❖ Doctor's Choice - Thyrodine

Marketed by [Doctor's Choice](#), Canada 

All identified ingredients:

- * Bovine thyroid from New Zealand.
- * Thyroid Gland (bovine=beef) 65 mg
- * Fucus Vesiculosus (kelpware 5:1) 50 mg
- * Zinc Picolinate (elemental zinc 5mg) 25 mg
- * Iodine (potassium iodide) 100 mcg

Dosage 65 milligrams

Brand History

❖ Dr Ron's - Thyroid

Marketed by [Dr Ron's](#), United States 

All identified ingredients:

- * 30 mg bovine thyroid
- * 470 mg liver

Dosage 30 milligrams

Brand History

❖ Dr Westin Childs' - Thyroid Glandular+

Marketed by [Restartmed](#), United States 

All identified ingredients:

- * Iodine 40mcg
- * Selenium 50mcg
- * Dulse 400mg
- * Thyroid Gland Powder (New Zealand or Argentina bovine) 150mg
- * Adrenal Gland (Argentina bovine)
- * Irish Moss 40mg
- * L-Tyrosine 30mg
- * Anterior Pituitary Gland 15mg
- * Bladderwrack 15mg
- * Spleen (Argentina bovine) 5mg
- * Thymus Gland 5mg

Dosage **150 milligrams**

Brand History

❖ Eastern Pharmaceuticals - Real Thyroid

Marketed by [Eastern Pharmaceuticals](#), Vietnam 

Produced as a supplement and not manufactured in an approved pharmaceutical facility.

All identified ingredients:

- * Seaweed powder - 65mg
- * Porcine thyroid powder - 60mg (1 grain)
- * Potassium iodide - 10mcg
- * Selenium yeast - 3mcg
- * dextrose
- * corn starch
- * Avicel PH101
- * PVP K30
- * ethanol
- * magnesium silicate
- * magnesium stearate

Dosage 60 milligrams

Brand History

❖ Eastern Pharmaceuticals - VitaliThy

Marketed by [Eastern Pharmaceuticals](#), Vietnam 

Produced as a supplement and not manufactured in an approved pharmaceutical facility.

All identified ingredients:

- * Porcine thyroid powder - 60mg (1 grain)
- * Spica Prunellae siccus (Self-Heal) extract - 30 mg
- * Ashwagandha extract - 10mcg
- * Selenium yeast - 3mcg
- * Gelatin capsule shell
- * Dextrose
- * Magnesium Stearate
- * PVP K30
- * Ethanol
- * Capsules are coloured bright blue.

Dosage 60 milligrams

Brand History

❖ Emerald Laboratories - Thyroid Health

Marketed by Emerald Laboratories California, USA 

Produced as a supplement and not manufactured in an approved pharmaceutical facility.

All identified ingredients:

- * Porcine thyroid powder - 60mg (1 grain)
- * Selenium (SelenoExcell®)
- * Iodine (potassium iodine)
- * Thyroid Glandular Powder (Bovine-sourced, thyroxine-free, freeze-dried)
- * Sensoril® Ashwagandha Extract (8% Withanolides)
- * Tyrosine
- * Rosemary Extract (6% Carnosic Acid)
- * Whole-Food Proprietary Blend
- * Organic Whole Food Sprout Powders (Organic Quinoa, Organic Mung Bean, Organic Millet), Probiotic Blend (200 million CFU's Acidophilus/B. Bifidum)
- * Plant Enzyme Blend (Lipase, Lactase, Protease, Hemicellulase, Cellulase, Alpha-Galactosidase, Amylase, Bromelain, Papain, Acid Stable Protease, Fungal Amylase (non-pathogenic aspergillus orzae))
- * Fructo-Oligosaccharides
- * Whole Food Pomegranate Juice Powder
- * Organic Whole Food Freeze-Dried Fresh Acai Powder
- * Whole Food Mangosteen Hull Powder
- * Organic Whole Food Noni Fruit Powder.

Dosage **350 milligrams**

Brand History

❖ Endo-met - Thyro Complex

Marketed by [Endo-met](#), United States 

All identified ingredients:

- * Kelp (ascophyllum nodosum extract) 300 mg †
- * Iodine (from kelp extract) 900 mcg 600%
- * Bovine Thyroid Powder 60 mg †
- * Porcine Adrenal Powder 30 mg †
- * Bovine Pituitary Powder 10 mg †
- * Porcine Spleen Powder 10 mg †

Dosage 60 milligram

Brand History

❖ Evolved Elements - Thyroid

Formulated for and distributed by Evolved Elements, San Diego, California
United States 

All identified ingredients:

- * Thyroid Bovine Freeze-Dried (New Zealand) 200 mg
- * Long grain rice flour
- * Gelatin (capsule)
- * Vegetable stearate
- * Silica

Dosage 200 milligram

Brand History

❖ Forefront - Raw Desiccated Thyroid

Marketed by [Forefront](#), United States 

All identified ingredients:

- * raw desiccated New Zealand bovine thyroid
- * rice flour
- * bovine gelatin capsule
- * purified water.
- * cellulose ‡
- * dicalcium phosphate ‡
- * silica ‡

The ingredients on the Supplement Facts lists do not include ingredients marked ‡ But they are included on the full Ingredients lists.

Dosage 65 milligrams

Dosage 130 milligrams

Brand History

❖ Nameless - Tru Thyroid †

Marketed by Nameless, Thailand 

- * Natural Desiccated Thyroid Powder (porcine)
- * Microcrystalline Cellulose
- * Dicalcium Phosphate
- * Magnesium Stearate

Dosage ½ grain (32 milligram)

Brand History

2022 First seen

❖ Natural Sources - Raw Thyroid

Marketed by [Natural Sources](#), United States 

All identified ingredients:

- * Thyroid Tissue 50 mg
- * Adrenal Tissue 20 mg
- * Pituitary Tissue 10 mg
- * Thymus Tissue 5 mg
- * Spleen Tissue 5 mg
- * Kelp 300 mg (Some versions do not list Kelp.)
- * Some versions say American ginseng. Some say Korean White Ginseng.

Dosage 50 milligrams

Brand History

❖ Natural Thyroid Solutions - Thyrogold

Marketed by [Natural Thyroid Solutions](#), United States 

All identified ingredients:

- * Whole-gland thyroid powder sourced from Non-GMO pasture-fed New Zealand cows
- * 100 mg L-Aspartic acid
- * 25mg 10% Coleus Forskohlii extract
- * Silica
- * Certified Organic Coconut oil powder
- * Vegetable Capsules

This is the claimed thyroid hormone content:

How much T4 and T3 Thyro-Gold has?

- *A 150 mg capsule of Thyro-Gold contains 50 mcg of T4 and 12.5 mcg of T3*
- *A 300 mg capsule of Thyro-Gold contains 100 mcg of T4 and 25 mcg of T3*

Dosage 150 milligrams

Dosage 300 milligrams

Brand History

❖ Numedica - Thyrodex T-150

Marketed by [Numedica](#), United States 

All identified ingredients:

- * Vitamin A (as beta carotene) (2,000 IU)
- * Vitamin B2 (as riboflavin)
- * Calcium (as calcium citrate, calcium bisglycinate chelate†)
- * Iodine (from kelp (*Laminaria* sp.) (thallus) extract)
- * Magnesium (as magnesium citrate)
- * Zinc (as zinc citrate, zinc bisglycinate chelate†)
- * Manganese (as manganese citrate, manganese bisglycinate chelate†)
- * Potassium (as potassium gluconate hydrochloride)
- * Irish moss (*Chondrus crispus*) (whole plant)
- * Parsley (*Petroselinum crispum*) (leaf)
- * Adrenal Gland (tissue) (bovine)
- * Horsetail (*Equisetum arvense*) (aerial parts)
- * Pituitary (tissue) (bovine)
- * Spleen (tissue) (bovine)
- * Thymus (tissue) (bovine)
- * Thyroid (bovine)
- * L-Tyrosine
- * Hydroxypropyl methylcellulose (vegetable capsule)
- * magnesium stearate.

Dosage 150 milligrams

Brand History

❖ Nutriest - Grass-Fed Desiccated Beef Thyroid

Marketed by [Nutriest](#), Estonia 

All identified ingredients:

- * freeze-dried organic beef whole thyroid glandular (20%)
- * kidney (50%)
- * liver (30%)
- * selenium
- * vitamin B3
- * vitamin A

Dosage 80 milligrams thyroid

Brand History

❖ Nutri-Meds - Desiccated Bovine Thyroid Health Capsules

Marketed by [Nutri-Meds](#), United States 

All identified ingredients:

- * Lyophilized Bovine Thyroid Tissue
- * Gelatin from free range sources
- * L-Leucine
- * L-Lysine
- * Silica

Dosage 65 milligrams

Dosage 130 milligrams

Brand History

NXGEN - Nxgen Grass Fed Beef Thyroid

Marketed by [NXGEN](#), Australia 

All identified ingredients:

- * Australian Freeze Dried Grass Fed Thyroid 30mg (Bovine)
- * Australian Grass Fed Liver 470 mg (Bovine)
- * Gelatin Capsule.

Dosage 30 milligrams

Brand History

❖ Piping Rock - Grass Fed Beef Thyroid

Marketed by [Piping Rock](#), United States 

All identified ingredients:

- * Grass Fed Thyroid (Bovine) * (Sourced from Argentina or New Zealand.)
- * Other ingredients:
- * Gelatin Capsule
- * Vegetable Magnesium Stearate
- * Silica

Dosage 200 milligrams

Brand History

❖ Piping Rock - Ultra Thyroid Support

Marketed by [Piping Rock](#), United States 

Note: This has an extremely low thyroid glandular content.

All identified ingredients:

- * Thiamin (Vitamin B-1) (as Thiamin HCl)
- * Riboflavin (Vitamin B-2)
- * Niacin (as Niacinamide)
- * Vitamin B-6 (as Pyridoxine HCl)
- * Folate (25 mcg Folic Acid)
- * Iodine (from kelp)
- * Zinc (as Zinc Oxide)
- * Selenium (as L-Selenomethionine)
- * Copper (as Copper Amino Acid Chelate)
- * Thyroid Glandular (Bovine)
- * L-Tyrosine Flax (*Linum usitatissimum*) (seed)
- * Ashwagandha (*Withania somnifera*) (root)
- * Other ingredients:
 - * Rice Powder,
 - * Gelatin Capsule,
 - * Vegetable Magnesium Stearate
 - * Silica

Dosage **5.5 milligrams**

Brand History

❖ Procepts - Metavive I, II Porcine

Marketed and Manufactured by [Procepts](#), United Kingdom 

All identified ingredients:

- * Rice Bran
- * Porcine Thyroid Complex (Standardised 5'-Ribonucleotides, Porcine Thyroid Gland)
- not defatted
- * Vegetable Cellulose Capsule

For further information and research articles on the use of nucleotides, please visit: www.nucleotides4health.org

Dosage	40mg capsule Metavive I - Porcine Thyroid Complex
Dosage	80mg capsule Metavive II - Porcine Thyroid Complex
Dosage	60mg capsule Metavive Pro - Porcine Thyroid 60mg Only available through a practitioner.

Brand History

❖ Procepts - Metavive III, IV Bovine

Marketed and Manufactured by [Procepts](#), United Kingdom 

All identified ingredients:

- * Rice Bran
- * Bovine Thyroid Complex (Standardised 5'-Ribonucleotides, Bovine Thyroid Gland) - not defatted
- * Vegetable Cellulose Capsule

For further information and research articles on the use of nucleotides, please visit: www.nucleotides4health.org

Dosage 40mg capsule Metavive III - Bovine Thyroid Complex

Dosage 80mg capsule Metavive IV - Bovine Thyroid Complex

Dosage 130mg capsule Metavive Pro II - Bovine Thyroid
Only available through a practitioner.

Brand History

❖ Professional Health Products - Eco Thyro

Marketed by [Professional Health Products](#), Manufactured by [Randal](#), United States 

All identified ingredients:

Claims no ingredients other than thyroid and tracheal cartilage though the vegetarian capsule is additional.

Other claims exclude tracheal tissue but add organic rice flour.

Does not identify bovine or porcine but seems unlikely to be anything other than bovine given the New Zealand source.

Dosage 125 milligrams

Brand History

❖ Provanz - Thyrovanz Bovine Thyroid Glandular

Marketed by [Provanz](#), United States 

All identified ingredients:

- * Thyroid sourced from New Zealand.
- * Gelatin
- * Rice Flour
- * Magnesium Stearate
- * Silica.

Dosage 25 milligram
 50 milligram
 50 milligram
 75 milligram
 100 milligram
 150 milligram
 300 milligram

Brand History

❖ Regenerative Nutrition - Thyro Active 2 Porcine

Marketed by [Regenerative Nutrition](#), Seychelles 

All identified ingredients:

Desiccated Whole Raw Porcine Thyroid Gland

Microcrystalline Cellulose (Tree Fibre)

Capsule Shell - Vegetable Cellulose

Dosage **65mg (1 grain) Porcine**

Brand History

❖ Regenerative Nutrition - Thyro Active 2 Bovine

Marketed by [Regenerative Nutrition](#), Seychelles 

All identified ingredients:

- * Desiccated Whole Raw Bovine Thyroid Gland
- * Microcrystalline Cellulose (Tree Fibre)
- * Capsule Shell - Vegetable Cellulose

Dosage **65mg (1 grain) Bovine**

Brand History

❖ Solaray - Thyroid Caps

Marketed by [Solaray](#), United States 

Claims to be Thyroxin-free

All identified ingredients:

- * Iodine (as Potassium Iodide)
- * Magnesium (as Magnesium Asporotate™ and Oxide)
- * Zinc (as Zinc Gluconate)
- * Copper (as Copper Asporotate™)
- * Manganese (as Manganese Asporotate™)
- * Molybdenum (as Molybdenum Glvcinate)
- * Thyroid Substance (Thyroxin-free) (bovine)
- * L-Tyrosine (microbial fermentation)
- * Vegetable Cellulose Capsule
- * Cellulose
- * Silica
- * Magnesium Stearate
- * Trace Mineral Complex.

Dosage 150 milligrams

Brand History

❖ Swanson - Thyroid Glandular

Marketed by [Transformation](#), United States 

All identified ingredients:

- * Microcrystalline cellulose (plant fiber)
- * gelatin
- * magnesium stearate
- * silica
- * medium-chain triglycerides oil (palm).

Unusually, this product claims “Certified Thyroxin Free”

Dosage 200 milligram

Brand History

❖ The Wellness Way - Thyroid Glandular

Marketed by The Wellness Way, United States 

Sourced from New Zealand.

All identified ingredients:

- * Grass-fed liver [bovine] 1800 mg
- * Grass-fed thyroid [ovine] 200 mg
- * Gelatin

This claims that the thyroid is ovine - that is, from sheep.

Dosage 200 milligram (thyroid)

Brand History

❖ Transformation - Thyroid Complex

Marketed by [Transformation](#), United States 

All identified ingredients:

- * Vitamin B6 (as pyridoxal-5-phosphate)
- * Zinc citrate
- * Copper citrate
- * L-Tyrosine
- * Bladderwrack
- * Thyroid concentrate
- * Anterior pituitary
- * Hypothalamus Bovine
- * Tzyme Enzyme Blend (Protease, Peptidase, Phytase, Glucoamylase, Pectinase, alpha-Galactosidase, Cellulase, Hemicellulase)
- * Capsule contains gelatin and water

Dosage 50 milligram

Brand History

❖ Ultra Enterprises - Raw Thyroid

Marketed by [Ultra](#) Enterprises, United States 

All identified ingredients:

- * raw thyroid substance (bovine) (thyroxin free)
- * freeze dried, defatted, uncut, 100% pure and bse free from New Zealand.

Dosage **200 milligrams**

Brand History

Vinco - Thyroid Gland

Marketed by [Vinco](#), United States 

All identified ingredients:

- * Thyroid Bovine Freeze-Dried (New Zealand)
- * Long Grain Rice Flour
- * Gelatin
- * Vegetable Stearate
- * Silica

Dosage 200 milligrams

Brand History

❖ Other brands and makes

Any mentioned here are for historical interest only. They are no longer available.

Nutri-Pak Natural Thyroid (†)

Nutri Thyroid (†)

Thyroid USP Manufacturers

Thyroid USP is the **Active Pharmaceutical Ingredient** (API) as supplied to medicine manufacturers. This is for general reference but will not include any detail beyond name, county and, where known, a web address.

Quite clearly, there are other manufacturers but this list is all I have identified.

American Laboratories Inc., United States

<https://www.americanlaboratories.com/>

Thyroid USP no longer listed on their products documentation. This was the sole USA Thyroid USP producer.

Biofac Denmark

<https://biofac.dk/>

Bioiberica, Spain

<https://www.bioiberica.com/>

Leto Medical, LLC, United States

Distributor of Thyroid USP - source SPL.

Appears to be closely associated with or part of Fagron.

1316 Commerce Drive NW, Decatur, AL 35601

<https://www.letcomedical.com/>

Medisca, United States

<https://www.medisca.com/>

PCCA, United States

Importer of Thyroid USP from European source(s).

<https://pccarx.com/Products/ProductCatalog>

Sichuan Deebiotech Co. Limited, China

Partners Medisca.

<https://www.deebioapi.com/company-profile/>

Sichuan Friendly Pharmaceutical Co. Limited, China

No web address found

Specialty Process Labs (SPL), United States

Partnered with RLC. Partnered with Letco/Fagron. Claims 100% USA sourced.

<https://www.splabsglobal.com/>

Appendixes

A: ATC Codes

B: Brand and Generic Names

C: Companies - Manufacturers, Importers and Distributors

D: Key to Symbols

E: Excipients

A. ATC Codes

The Anatomical Therapeutic Chemical Classification System (ATC) assigns specific codes to groups of medicines which act similarly - on the same organs. This is used widely around the world and can help to search even when the website language is unfamiliar.

Those relevant to thyroid hormone medicines are listed below. At present, only medicines belonging to H03AA01 and H03AA02 are approved in the UK.

Code/prefix			Product groups
H03A			Thyroid preparations
H03A	A		Thyroid hormones
H03A	A	01	Levothyroxine
H03A	A	02	Liothyronine
H03A	A	03	Combinations of levothyroxine and liothyronine
H03A	A	04	Tiratricol
H03A	A	05	Thyroid gland preparations
H03A	A	51	Levothyroxine and iodine compound combinations

B. Brand and Generic Names

This document refers to numerous companies. The names used will not always be the full legal names of those companies. Even companies which appear to have the same name can be entirely separate companies, especially in different countries.

Generic

Many medicines are supplied without a formal product branding - for example, just “levothyroxine sodium”. However, even these products will be packaged under a company name.

There is a view that generic medicines are in some way inferior to brands. This has a basis in the origins of the brand vs. generic system. But has little relevance to the thyroid hormone market.

First, so far as I have been able to tell, neither levothyroxine nor liothyronine was patented in the UK (nor the USA). Had they been patented; it would have run out over forty years ago.

Second, the only products which could possibly be regarded as being out of patent, for example, Glaxo launched both Eltroxin and Tertroxin back in the 1950s. But both products have had formulation and manufacturer changes over the years. Advanz Mercury Pharma Eltroxin is sometimes available but is identical to Advanz Mercury Pharma Levothyroxine. And Advanz Mercury Pharma Liothyronine is no longer marketed in the UK under Tertroxin branding. (But is still supplied to Australia under that name.)

This is a different situation to products like Prozac now being also supplied as generic Fluoxetine.

Brand

Some medicines will be specifically branded. For example, Eltroxin is a brand name used for some Mercury Pharma levothyroxine products supplied by Advanz in the UK, but also for different products by Aspen in much of the rest of the world, and by GlaxoSmithKline in India.

‘Own label supplier’ or repackager

Some companies acquire their products from other companies but packaged under their own name. The legal responsibilities for these products remain with the companies which own the marketing and manufacturing licences.

An 'own label supplier' might change the actual product supplied with no notice. Further, different dosages of what might appear the same product could be (and sometimes are) supplied by different companies and have different formulations to each other. This will be stated on the packaging, but it might not be obvious.

The name of the Marketing Authorisation Holder and the licence number will always be printed on the outside of the packaging on all UK medicines. That means it is possible to check without opening any pack. Some pharmacists/pharmacy assistants seem not to realise this.

C. Companies - Manufacturers, Importers and Distributors

The NHS dm+d database (<https://services.nhsbsa.nhs.uk/dmd-browser/>) lists “suppliers” for each medicine. Those listed against levothyroxine and/or liothyronine products are shown below.

A supplier appears to be defined as any company from which products can be ordered and could include Manufacturers, Importers and Distributors. Even then, the name could be strictly the order-processing and distribution arm of, say, a manufacturing company. And small, specialist importers, such as implied by “Special Order”, are not included.

There is much confusion because these companies sometimes have the same as company names on packs of medicines, but sometimes we don't see these names. In general, we only rarely see distributor names unless we notice a delivery van outside a pharmacy. For example, Teva in the UK do not manufacture any thyroid hormone medicines. They are manufactured by parts of Teva in various EU countries, then imported by Teva in the UK. And distributed by the same or another Teva company as well as supplied to other distributors.

Suppliers can be very reluctant to respond to patients. Many seem to regard their customers as the pharmacies which order from them, or distributors, rather than the patients who take the medicines. Some are very much more open and helpful than others.

AbbVie

AbbVie Inc. North Chicago, Illinois, U.S.A.

<https://www.abbvie.com/>

<https://www.allergan.com/>

<https://www.allergan.com/products/armour>

Acella

Acella Pharmaceuticals, 1880 McFarland Parkway Suite 110-B,
Alpharetta, GA 30005

<https://www.acellapharma.com/>

<https://www.acellapharma.com/product/npthyroid/>

Allergy Research Group

Allergy Research Group, 2300 S Main St, Salt Lake City, Utah 84115

questions@AllergyResearchGroup.com

<https://www.allergyresearchgroup.com/>

American Biologics

American Biologics

<https://www.americanbiologics.com/>

contact@AmericanBiologics.com

info@americanbiologics.com

Ancestral

Ancestral Supplements, 18688 W FM 1097 RD, Montgomery 77356-7350, Texas USA

<https://ancestralsupplements.com/>

ANI

ANI Pharmaceuticals, Inc., Baudette, MN 56623

<https://www.anipharmaceuticals.com/>

Azurity

Azurity pharmaceuticals, 8 Cabot Road, Suite 2000, Woburn, MA 01801

Azurity Pharmaceuticals, Inc. was formerly known as CutisPharma, Inc., parent company of Silvergate Pharmaceuticals, Inc.

<https://azurity.com/>

Biotics Research

Biotics Research Corporation, 5245 Business Park Dr. Rosenberg, TX 77469

biotics@bioticsresearch.com

<https://www.bioticsresearch.com/>

CompoundLabs

CompoundLabs, 62C Diana Drive, Wairau Valley, North Shore 0627

www.compoundlabs.co.nz

De Natuur Apotheek

The NatuurApotheek, Weteringweg 14, 2641 KM Pijnacker, The Netherlands

recepten@natuurapotheek.com

<https://denatuurapotheek.nl/>

<https://nutritional-medicine.nl/>

Doctor's Choice

Doctor's Choice, Cochrane, AB, Canada

info@doctorschoice.ca

<https://doctorschoice.ca/>

Dr Ron's

Dr. Ron's Ultra-Pure, 48 Sperry Rd, Watertown, Connecticut 06795, United States

<https://www.drrons.com/>

Eastern Pharmaceuticals

(Cong Ty TNHH EASTERN PHARMACEUTICALS), Vietnam

<https://easternpharmaceuticals.org/>

Endo-met

Endo-met Laboratories [sic], Inc., 2225 West Alice Avenue, Phoenix, AZ 85021 USA

information@endomet.com

<https://www.endomet.com/>

Erfa

Taken over by: Searchlight Pharma Inc., 1600 Notre-Dame Street West, Suite 312, Montreal, Quebec, H3J 1M1, Canada

info@searchlightpharma.ca

<https://searchlightpharma.com/>

<https://searchlightpharma.com/commercial-brands/> (See Q-Z section.)

Forefront

Forefront Health, P.O. Box 21570, Boulder, Colorado 80308

support@forefronthealth.com

<https://shop.forefronthealth.com/>

Glostrup

Glostrup apotek, Hovedvejen 101, 2600 Glostrup, Denmark

glostrup@apotekeren.dk

109KN@apoteket.dk

Danish <https://www.glostrup-apotek.dk/>

Greater Pharma

Greater Pharma, 46, 46/1-2 Soi Charansanitwong 40, Charansanitwong RD., Bangyikhun, Bangplad, Bangkok 10700 Thailand.

Thai <https://greaterpharma.com/en/>

Green Dispensary

Green Dispensary, 211 Payneham Rd, St Peters, SA, 5069

compounding@greendispensary.com.au

<https://greendispensarycompounding.com/>

Kachhela

Kachhela Medex Private Limited, Third Shop No.335 Near Haj House Sandesh Dawa Bazaar Ganjipeth, Jaripatka, Nagpur-440018, Maharashtra, India

LGM

LGM Pharma Solutions, LLC, Irvine, CA 92614

<https://lgmpharma.com/>

Natural Noon

NATURAL NOON CO., LTD., Damnak Chang'aeur, Prey Thum, Kaeb, Kep, 0, Cambodia

Natural Sources

Natural Sources, 810 Avenida Salvador, San Clemente CA 92672

Natural Thyroid Solutions

Natural Thyroid Solutions, Jupiter, Florida 33458

tammy@naturalthyroidsolutions.com

<https://naturalthyroidsolutions.com/>

Nivagen

Nivagen Pharmaceuticals, Inc., Sacramento, CA 95827 USA

<https://www.nivagen.com/>

Novitium

Novitium Pharma, 70 Lake Drive, East Windsor, NJ 08520

Taken over by [ANI](#) 22/11/2021

NuMedica

NuMedica, 9503 E 55th Place, Tulsa, OK 74145

<https://numedica.com/>

Nutriest

Estonia, Tartu, Teguri 38b, 50107

<https://nutriest.eu/>

Nutri-Meds

<https://nutri-meds.com/>

NXGEN

NXGEN Biosciences Pty Ltd, 150 Hartwood Avenue Robin Hill NSW 2795

hello@nxgenwholefoods.com.au

<https://nxgenwholefoods.com.au/>

Piping Rock

Piping Rock Health Products, LLC. 2120 Smithtown Avenue, Ronkonkoma, New York, United States

<https://pipingrock.com/>

Procepts

Procepts Nutrition

<https://www.procepts.co.uk/>

Professional Health Products

<https://professional-health-products.com/>

Provanz

Provanz Supplements Inc., 1712 Pioneer Ave Ste 775, Cheyenne, WY, 82001, USA

<https://www.provanz.com/>

Randal

Randal Optimal Nutrients, P.O. Box 7510, Santa Rosa, CA 95407

<https://www.randaloptimal.com/>

Receptura

Receptura Pharmacy, Altenhöferallee 5, 60438 Frankfurt am Main

<https://www.receptura.de>

Regenerative Nutrition

Regenerative Nutrition Ltd., 306 Victoria House, Victoria, Mahe, Seychelles

enquiries@regenerativenutrition.com

<https://www.regenerativenutrition.com/>

Restartmed

Dr. Westin Childs, Restartmed, 10423 E Naranja. Ave, Mesa, AZ 85209

hello@restartmed.com

<https://www.restartmed.com/>

RLC

RLC, 27626 N 44TH St Cave Creek, AZ, 85331-6622 United States

Formerly Western Research Laboratories, 2404 West 12th Street, suite #4 - Tempe, Arizona 85281

Formerly JMI Western Research

<https://www.rlclabs.com/>

<https://getrealthyroid.com/>

Roseway

Roseway Labs, Zetland House, 5-25 Scrutton, Street, London, EC2A 4HJ

info@rosewaylabs.com

<https://rosewaylabs.com/>

Schlossplatz Apotheke

Apotheke-am-Schlossplatz Reichsstr. 49, 53125 Bonn

German <https://www.apotheke-am-schlossplatz.de>

Solaray

222 S. Main Street, Salt Lake City, UT 84101

info@solaray.com

<https://solaray.com/products/>

Sriprasit

Thai <http://www.sriprasit.com/en/>

T.MAN

69/1 Soi Bangkhunthian 14, Samaedum, Bangkhunthian, Bangkok
10150 Thailand

Thai <https://www.tmanpharma.in.th/en/home-en/>

Transformation

Transformation Enzymes, 2900 Wilcrest, Suite 220, Houston, TX
77042

orders@tecenzymes.com

moreinfo@tecenzymes.com

Ultra

Ultra Enterprises, PO Box 1712, Whittier, CA 90609

b.kaliultra4@gmail.com

<https://ultraent.com/>

Vinco

Vinco Inc., 1519 Mars-Evans City Road
Evans City, PA 16033

customerservice@vincoinc.com

<https://www.vincoinc.com/>

Vitruvias

Vitruvias Therapeutics, Auburn, AL 36830

<https://www.vitruvias.com/>

Weltapotheke

Weltapotheke, Lerchenfelder Straße 122, 1080 Wien

office@weltapotheke.at

German <https://weltapotheke.at/>

D. Key to Symbols



Product description for officially recognised products.



Product description for products compounded to order.



Product description for glandular products with no declared thyroid hormone potency.



Used to identify products which either have not been marketed, or are no longer available. (This is not used for temporary supply issues.)

PL/MAH

The Product Licence number (also called Marketing Authorisation Holder) or equivalent.

PIL

Prefixed by some sort of site identification (e.g. a company or other organisation). The **Patient Information Leaflet**. Similar to the SPC but targeted at patients.

Some links to PIL documents are to a page where the current link may be found.

SPC

Prefixed by some sort of site identification (e.g. a company or other organisation). The **Summary of Product Characteristics** document. Similar to the PIL but targeted at medical professionals.

Some links to SPC documents are to a page where the current link may be found.



The width/diameter of the product in millimetres.



The thickness of the product in millimetres.



The weight of the product in milligrams.

E. Excipients

This document has product matrixes which identify excipients, where known. Details of many excipients are in my Excipients document.

helvella - Excipients

If the last updated date in a copy your have downloaded isn't very recent, please download a new copy!

<https://www.dropbox.com/scl/fi/tud6r8f51au0g4w10xqa0/helvella-Excipients.pdf?rlkey=aeo2dyb635chtf30lcsiyyqj2&e=1&st=oofsriqf&dl=1>

FINIS