

Natural Desiccated Thyroid: Dr. Richard Guttler's False Claim about It

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Abstract. Dr. Richard Guttler has been a member of the American Association of Clinical Endocrinologists' guidelines committee for the diagnosis and treatment of hypothyroidism, and he has proclaimed himself "the real thyroid expert." In 2004, Guttler published false claims about natural desiccated thyroid (NDT). One of his claims is that NDT has "none of the benefit" that T₄ provides patients. In the same document, however, he himself showed that this claim against NDT is false. He did so by citing historical evidence that desiccated thyroid is an effective treatment for hypothyroidism. Later in 2004, I published a rebuttal of Guttler's false claim about NDT. He didn't attempt to refute my argument that his claim was false; instead, he kept the false claim online at his website. He subsequently stated that I failed in my rebuttal to use "a single shred of evidence." This statement, too, is a false claim by Guttler. In this paper, I provide more evidence that his allegation against NDT is false. I believe it is crucial to the health and well-being of many hypothyroid patients that Guttler open-mindedly acknowledge the falsity of his claim that NDT does not provide benefits. Some clinicians may accept without question his false claim and deny patients NDT as a potentially effective alternative when they fail to benefit from T₄ replacement.

Keywords. Armour Thyroid • Desiccated thyroid • Nature-Throid • NDT • Richard Guttler • T₄ • Westhroid

Prefacing Note: Dr. Richard Guttler has published false claims about natural desiccated thyroid (NDT).^[3] In his denouncing claims, he has cited the brand of NDT called Armour Thyroid. However, in his statements, he has also used the term "thyroid extract." In that this term is a synonym for "desiccated thyroid" in the thyroidology literature, I deduce that Guttler also condemns other NDT brands, such as Nature-Throid and Westhroid. Because of this, I refer in this paper to NDT rather than specific brands of natural desiccated thyroid.

Introduction

Dr. Richard Guttler is a thyroid specialist in the United States. He has served on the guidelines committee of the American Association of Clinical Endocrinologists' for the diagnosis and treatment of hypothyroidism.^[2]

Guttler has proclaimed himself "the real thyroid expert."^[13] From such a self-reputed medical adept, it's reasonable to expect statements of high scientific credibility. However, on May 15, 2004, Guttler published the claim that NDT has "none of the benefits"^[3] of T₄. This claim—as proven by the evidence I cite below—*completely* lacks credibility.

Guttler himself showed that his claim against

NDT is false. He did so by preceding his denunciation of NDT as a therapy by citing the early historical record of the effective treatment of hypothyroidism with desiccated thyroid.^[3]

On August 12, 2004,^[1] I refuted Dr. Guttler's false claim that NDT provides no benefits. As in all critical analyses I publish, I cited the evidence from which I deduced that Guttler's claim was wrong. Because I cited evidence, I was astonished by his response to my rebuttal.^[27]

Guttler responded in a newsletter dated August 16, 2004.^[27] In the newsletter, he made reproaching remarks about the famous thyroid-patient advocate Mary Shomon.^[16,44] He also referred to three doctors who had responded to his puerile criticisms of Mary. I was the third of those doctors. Guttler referred to us as, "three doctors that [*sic*] wrote critical articles about the present state of knowledge *without a single shred of evidence.*"^[27] (Italics mine.)

After falsely stating that I argued against his claim "without a single shred of evidence," he went on to say: "I turned down a request to comment on the details of the last doctor's attack. I am too busy seeing thyroid patients in my center, and publishing real thyroid research papers, attending Thyroid [*sic*] meetings, and presenting new research with my USC

Keck School of Medicine Thyroid Group, to waste time with comments made by pseudo-thyroidologists.”^[27]

I believe Dr. Guttler deserves acknowledgment for his professional activities and affiliations, which he listed for us. But these have nothing whatever to do with the truth or falsehood of his claim about NDT.

Some of Guttler's readers may note that he shied away from debating the evidence I cited against his claim. They may feel that the reason he gave for backing away from debate—his professional activities and affiliations—is so impressive that he *must* have been right in his anti-NDT claim. Guttler himself may believe this.

If so, then Guttler and his readers are mistaken in their thinking. To imply that his claim against NDT is true by virtue of his professional activities and affiliations is a version of the logical fallacy called *ad hominem*. The fallacy implies that the only relevant evidence for the truth or falsity of a claim is *the person* who makes the claim. The *ad hominem* fallacy, then, suggests that Guttler's professional activities and affiliations are the evidence that proves the truth of his claim that NDT has none of the benefits of T₄.

However, Guttler's activities and affiliations are relevant evidence *only* for *one* class of claim: that he is professionally active and has professional affiliations. If the list he gave us is factual, then it proves the truth of that particular claim, and that claim only. But to no other class of claims is his activities and affiliations relevant as evidence. His evidence, then, is *conclusively irrelevant* to his claim that NDT has no clinical benefits.

Evidence that truly is relevant is the conclusions from research studies in which the effects of NDT on patients were evaluated. Below, I present enough such studies to make my point in this rebuttal—that is, that Guttler's claim that NDT has none of the benefits of T₄ is *demonstrably and resoundingly false*.

NDT Provides None of the Benefits of T₄

As I noted above, Dr. Guttler asserted that NDT has “none of the benefits”^[3] of T₄. Had he read and comprehended much of the historical literature on NDT and T₄, he would know that he could not *reasonably* assert this.

In 1892, Howitz,^[14] Fox,^[42] and MacKenzie^[15] independently showed that oral preparations of thyroid tissue (these were the earliest precursors of today's standardized NDT) were a highly effective

therapy for hypothyroid patients. These reports initiated oral desiccated thyroid as the standard treatment for hypothyroidism.

Many clinicians and hypothyroid patients today know that NDT is often far more effective than T₄. But few seem to be aware of how dramatically effective the original desiccated thyroid was. Its effectiveness was made clear, however, by comments of some highly credible physicians of those early days.

In the early 20th century, Sir William Osler (one of the most important physicians in all of medical history) wrote about desiccated thyroid as a treatment for hypothyroidism.^[43,p.900] His comments about the treatment in his textbook *Principles and Practice of Medicine* are important to an understanding of hypothyroid patients benefiting from NDT.

The first edition of Osler's textbook was published in 1892. It was republished every few years at least until 1935, which is the date of my copy of the book. Dr. Osler died on December 30, 1919. Therefore, sometime between 1892 and 1916, the last date of publication before his death, he wrote the following assessment of desiccated thyroid:

“Our art has made no more brilliant advance than in the cure of the disorders due to hypothyroidism. (Italics mine.) That we can today rescue children otherwise doomed to helpless idiocy—that we can restore to health the victims of myxedema [hypothyroidism]—is a triumph of experimental medicine”^[43,p.900]

He pointed out that the dried gland was the most convenient way for patients to medicate themselves with thyroid tissues. He then wrote:

“The results, as a rule, are unparalleled by anything in the whole range of curative measures. (Italics mine.) A poor, feeble-minded, toad-like caricature of humanity may be restored to mental and bodily health. Loss of weight is one of the first and most striking effects; one patient lost over 30 pounds within six weeks. The skin becomes moist, the urine is increased, the perspiration returns, the temperature rises, the pulse rate quickens, the mental torpor lessens and the basal metabolism increases.”^[43,p.900]

Dr. Osler, however, wasn't the only credible physician to extol the unprecedented effectiveness of thyroid tissue as a medicine. Editors of the *British*

Medical Journal wrote this following statement in 1893. This was only a year and a half after orally-ingested thyroid tissue became the preferable treatment for hypothyroidism:

“The series of papers and illustrated cases which have been published during the past eighteen months in the *British Medical Journal* will have sufficed to prove to our readers that, *in the treatment of myxedema* [hypothyroidism] *by thyroid extract, scientific medicine has achieved one of the most striking and significant triumphs which have ever been won in the field of practice.*”^[41,p.252] (Italics mine.)

Researchers who studied T₄ (the only thyroid hormone preparation Guttler advocates for hypothyroid patients) have acknowledged the clinical efficacy of NDT. Consider a 1950 report of a study in which different forms of T₄ were tested against one another. The researchers, Hart and MacLagan, found that L-thyroxine was the most active of the different forms of T₄. They wrote in their conclusion: “While we are not in a position to say that L-thyroxine sodium is any better in the treatment of myxoedema [hypothyroidism] than a reliable thyroid extract [NDT], *in our opinion it is certainly equally satisfactory.*” And they wrote, “We consider L-thyroxine sodium to be *as satisfactory as thyroid extract in myxoedema.*”^[17,p.518] (Italics mine.)

Hart and MacLagan’s words that L-T₄ was “equally satisfactory” and “as satisfactory as” NDT tells us that treatment with NDT did in fact satisfy hypothyroid patients and their clinicians. Hart and MacLagan’s words obviously contradict Guttler’s assertion that NDT provides “none of the benefits” of T₄.^[3]

However, we don’t have to depend on researchers’ opinions as the evidence that Guttler’s claim is wrong. Instead, we can look at the evidence that is most relevant—that is, the results of studies in which researchers *directly compared* the effects of T₄ and NDT.^[20,24,25,29,30,31,32,33,34,35,36,37,38,40]

Studies that Established the Clinical Benefits of NDT

In the 1920s and 1930s, researchers conducted studies in which they compared the effects of NDT and T₄. In 1926, for example, Boothby et al. reported that both NDT and T₄ effectively increased subjects’ metabolic rates.^[21]

In 1929,^[18] Thompson et al. reported using two

study patients to compare the effects of Squibb’s T₄ and Armour’s desiccated thyroid. *The two products had similar effects on three measurements: the basal metabolic rate, body heat, and clinical symptoms.* Roughly the same results were produced when patients took NDT by mouth and T₄ by injection. (At the time, too little data were available on the effects of T₄ taken by mouth, although some data suggested that the two routes of administering the preparation had similar effects.) In 1932, Salter et al.^[19,p.242] confirmed the 1929 findings of Thompson et al.^[18]

Also in 1932, Thompson et al. found the different dosages of NDT and T₄ that proportionally raised patients’ basal metabolic rates.^[20] In 1934^[22] and 1936,^[23] other researchers published similar results from their comparisons of NDT and T₄. Robertson and Kirkpatrick^[40] in 1952 and Sturnick in 1961^[38] confirmed the findings from previous studies in which researchers compared NDT and T₄.

In 1965, Sisson reported detailed differences in the effects of NDT, T₄, and T₃ on biochemical thyroid function tests. The differences were predictable, and we also find the same differences in laboratory practice today. What is important is this: the different test results confirmed the potency of all three types of thyroid hormone preparations—including NDT.^[39]

In 1978, Sawin et al.^[30] compared the biological effects of T₄ and NDT. The researchers noted that based on studies involving clinical findings and BMR measurements, authors of major medical textbooks or chapters in them considered 60 mg of desiccated thyroid to be biologically equivalent to 100 mcg of T₄.^[45,46,47,48]

However, Sawin et al. reported that they found that T₄ was more potent than previously thought. “Our data,” they wrote, “indicate that T₄ is indeed more potent than commonly thought and that 60 mg of desiccated thyroid is the approximate equivalent of 60 ÷ g [mcg] rather than 100 ÷ g of T₄.”^[30,p.1523]

Despite their finding that less T₄ than previously thought produced effects equivalent to those of NDT, they still found that desiccated thyroid was as effective as T₄. Indeed, they wrote, “*Desiccated thyroid is widely used in treating hypothyroidism and is quite satisfactory in the hands of many physicians.*”^[30,p.1523] (Italics mine.) Clearly, if NDT did not reliably provide the biological and clinical benefits that T₄ provided, Sawin et al. would not have reported the equivalence of the two types of products. But the fact is that they did report that in their respective effective dosages, T₄ and NDT *did* produce equivalent effects.

In a position paper that the British Thyroid Association published online,^[11] the Association stated, “*There has never been a direct comparison of these two treatments*”—referring, of course, to NDT and T₄. (Italics mine.) In a rebuttal to the Association,^[26] I cited 11 published studies in which researchers had, indeed, *directly compared* the effects of the two preparations.^[24,25,29,30,31,32,33,34,35,36,37]

I have since found three more published reports of direct comparisons.^[20,38,40] Combined, then, researchers have conducted and published at least 14 studies in which they compared the effectiveness of NDT to that of T₄. In none of the publications did the researchers report what Guttler claimed—that NDT provided none of the benefits of T₄.

Therapeutic Equivalence of NDT, T₄, and T₃. In studies conducted in the 1950s and 1960s, researchers compared the effects of NDT, T₄, and T₃. Their purpose was to determine the average dosage of each preparation that produced the same effects on patients. In three different studies,^[24,25,35] researchers found that 60 mg of NDT produced effects equivalent to 100 mcg (0.1 mg) of T₄. (Of course, as I wrote above, another research group later reported that they found that 60 mg of NDT produced effects equivalent to 60 mcg of T₄ rather than 100 mcg that researchers previously reported.^[30,p.1523])

Lavietes and Epstein were clear in the conclusion of their 1964 report of a study they conducted to compare NDT to T₄.^[35] They wrote, “Patients with hypothyroidism were treated with thyroid USP [NDT], thyroglobulin, sodium l-thyroxine [T₄], and l-triiodothyronine [T₃] in daily oral doses sufficient to relieve clinical manifestations of the hypothyroidism. These were given in the ratio of 60 mg of thyroid USP or thyroglobulin, 0.1 mg of thyroxine, and 0.025 of triiodothyronine. *These doses were found to be roughly equal in effectiveness.*”^[35,p.86] (Italics mine.) Singh et al. reported the same finding in 1972.^[25]

In a major textbook, *The Pharmacological Basis of Therapeutics*,^[12] thyroid specialist R.C. Haynes wrote that researchers have tested the effects of different thyroid hormone preparations after injecting them beneath patients’ skin. The tests showed that different preparations have different quantitative effects; for example, T₃ is more potent and faster acting than T₄. The tests also showed, however, that there is no appreciable difference in the qualitative (perceptual) response of a hypothyroid patient to proportional amounts of T₃, T₄, and NDT. Specifically, Haynes wrote, “*Equivalent clinical responses*

are obtained from the daily administration of approximately” 65 mg of desiccated thyroid, 65 mgs of thyroglobulin, 100 mcg of T₄, or 25 mcg of T₃.”^[12,p.1372] (Italics mine.)

I could go on citing other studies that show that Guttler’s anti-NDT claim *grossly* misrepresented the published medical and research literature on NDT. However, he himself clearly enough shows through self-contradiction that his disclaimer is false.

To Guttler, NDT both Works and Doesn’t Work

In the same newsletter in which Dr. Guttler denied that NDT benefits patients, he flagrantly contradicted his own claim.^[3] Consider the following quotes from the newsletter, and note that he made these statements before denying the benefits of NDT (all italics are mine):

- “Marnus-Levey [actually the researcher’s name was “Magnus-Levy”^[4,5]] . . . fed dried animal thyroid glands, the precursor of the alternative doctor’s beloved Armour, to normal men.” Guttler then wrote that in response to the dried thyroid substance, “there was [*sic*] marked rise in metabolism.” Then, referring to “the powerful substance causing this increased metabolism,” he stated that it “*had beneficial effects on cretins*” [children with disease resulting from hypothyroidism].

- He then wrote, “In 1891, Murray *cured myxedema*” [hypothyroidism] *with it*, and “1892 was the year *thyroid gland preparations were proven to treat thyroid gland failure.*”^[3]

- Next Guttler noted, “*Effective therapy for hypothyroidism was known by the end of the 19th century.*”^[3]

The “effective therapy for hypothyroidism” Guttler referred to, of course, was desiccated thyroid. It had to be, since, as I wrote in *The Metabolic Treatment of Fibromyalgia*,^[6] researchers didn’t isolate T₄ until 1915.^[7] They didn’t synthesize it until 1919,^[8] and they didn’t determine its chemical structure until 1927.^[9,10] Dr. Guttler himself, then, confirmed that more than 100 years ago, treatment with thyroid tissue effectively relieved hypothyroidism.

Conclusion

As I've pointed out elsewhere,^{[1][6][26][28]} studies show that T₄ replacement (which Dr. Guttler exclusively advocates for hypothyroid patients) is ineffective for many patients. Restricting these patients to T₄ replacement is *highly* likely to harm them through its ineffectiveness.

It's quite possible that some clinicians who read Guttler's newsletter will accept without question his grandiose self-labeling as "the real thyroid expert."^[13] Under sway of his swagger, these clinicians may take to heart his false claim that NDT doesn't benefit hypothyroid patients. If so, his claim may misguide these clinicians into denying their patients NDT as a possibly effective alternative treatment despite T₄ having failed to benefit them.

The potential harm to these patients is obvious. Because of this potential, Dr. Guttler, in my view, has a humanitarian obligation to open-mindedly apprise himself of studies that show the clinical benefits of NDT and to correct his false claim about NDT.

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