Town & Country
Compounding and Consultation

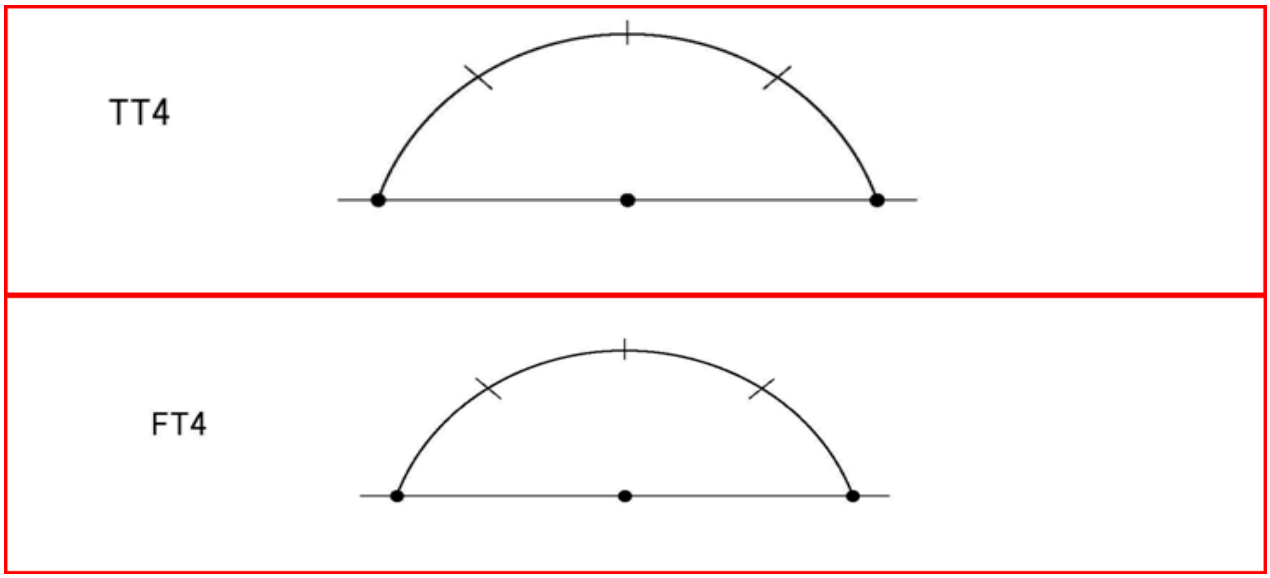
"Customized, Patient Specific, Compounded Medications"

Thyroid Gradient Levels

If thyroid binding and conversion were all "normal," then all results would point in the same direction on the chart, within their respective individual ranges.

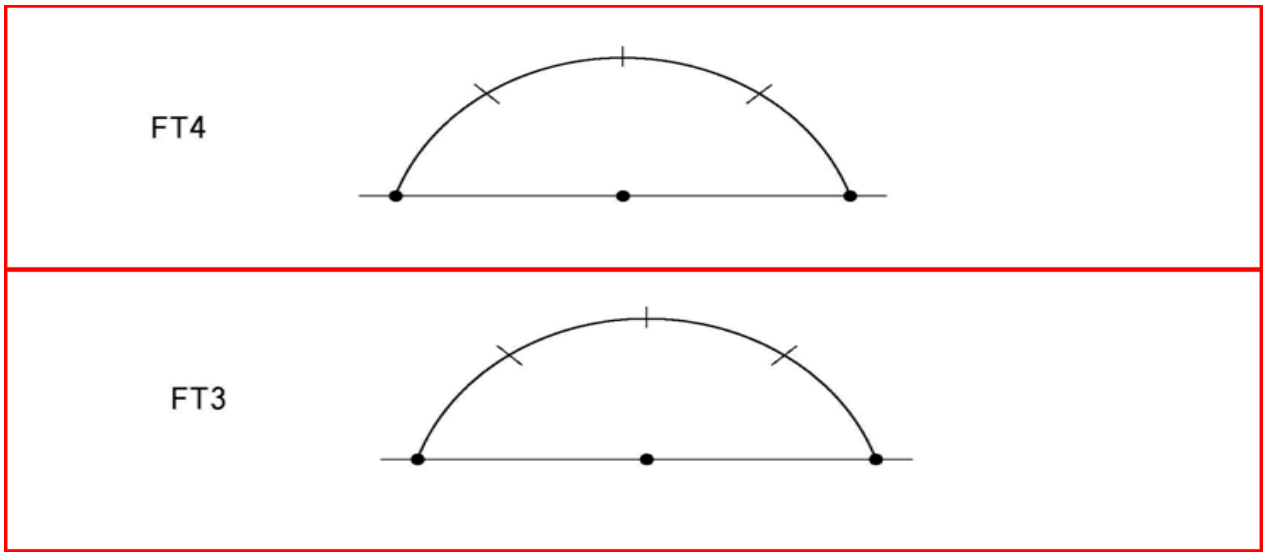
Comparing TT4 to fT4: Indication of binding

- **Example:** **If fT4 is lower relative to where TT4 is, within the normal range, this would indicate more than the normal amount of Binding.** This could be caused by estrogen dominance of excessive binding. (Note: binding can increase over a period of several months.)



Comparing fT4 to fT3: Provides interpretation as to the conversion of T4 to the active T3.

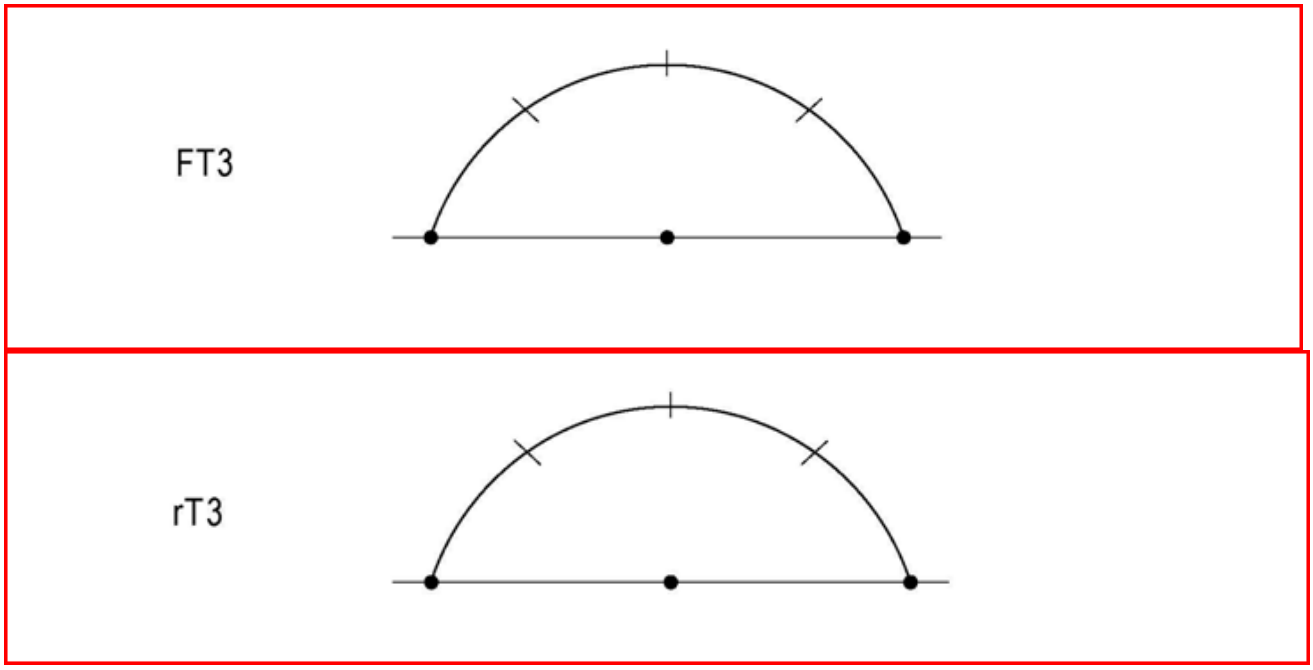
- **Example:** **If fT3 is relatively lower than fT4 then you have less than normal rate of conversion of T4 to T3.** If fT4 was at "1:00" on the dial, and fT3 was at "10AM" on the dial, this would indicate a less than normal rate of conversion.



Most importantly, comparing fT3 to rT3: **Provides information as to how T4 is being converted.**

- With normal conversion from T4 to near equal amounts of fT3 and rT3, the results within their respective ranges should be the same (i.e.: hands should point in the same direction).

If rT3 is higher within its range relative to fT3, rT3 is excessively blocking the effects of T3.



ASIDE: Although testing reverse T3 was originally part of the thyroid gradient levels, the author rarely recommends testing it any longer. Testing rT3 is an expensive option, and many labs have to outsource it, which delays getting results back. The author has found that by comparing fT4 to fT3 he can tell if the patient is converting normally. If poor conversion is indicated, rT3 can be predicted to be relatively high, and treatment optimized without the need to test eT3 itself.

Goals of therapy for this patient:

- **Lower the amount of T4 dosage, because T4 is higher than optimal, reduction of T4 should be done slowly. Decreasing T4 too quickly will result in high TSH values.**
- **Give more T3 therapy in a slow-release form (compounded) to help balance the excess in rT3 and provide metabolic effects and partial release of symptoms.**
- **Try to eliminate all possible causes for poor conversion of T4 to T3: (reaction to stress, high cortisol, glucocorticoids, low selenium, low zinc, low iron, low iodine, vitamin deficiency, and possibly excessive estrogen).**
- **Aim to bring all the lines plotted for the levels towards pointing to 12 o'clock, or midpoint. Attempt to bring compared measurements closer to overlapping.**

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Full article available upon request. Contact information is below.

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