

Blood Tests:

- **Hb A1c** - <5.4 good, 5.7-6.4 is prediabetes, 6.5 is diabetes – [2 Keto Dudes #77](#)
- **Fasting blood glucose** - 60-100 [KetoTalk 16](#)
- **Fasting insulin** - 2-5 per [Shawn Minor](#), > 5 indicates IR - [KetoTalk episode 30](#) & [LLVLC 1330](#)
- **Triglycerides** - <100 - [LLVLC 1330](#)), > 150 indicates IR (insulin resistance) - [LLVLC episode 1330](#)
- **HDL** - >60 - KetoTalk episode 112
- **TSH** - 2.5 to 3.5 is associated with increased heart attack and stroke - [KetoTalk episode 117](#)
- **Vitamin D** (32-60 [Ivor Cummins](#))
- **C Reactive Protein (HS CRP)** – 3, optimally <1 [LLVLC episode 1330](#)), [KetoTalk 86](#), [KetoTalk 112](#)
- **Homocysteine** - <7 [KetoTalk episode 86](#)
- **Ferritin** – 30-75 [Nasha Winters - Wise Traditions 2018](#)

Post prandial blood tests (after eating food or 75 grams glucose challenge):

- **2 hr postprandial blood glucose** should drop down below 120-110 - [Keto talk episode 10](#), >140 is diabetic - [Keto talk episode 10](#) & [LLVLC episode 1330](#)
- **2 hr postprandial insulin** <30 good, >40 you have a problem - [LLVLC 1397](#), [2 Keto Dudes #27](#), [LLVLC episode 1330](#)

Calculated:

- **Triglycerides to HDL Ratio** -triglycerides / HDL, under 2 you're fine, over 4 is starting to get too high, over 6 definitely too high - [2 Keto Dudes 16](#)
- **Homa-IR Calculations** (Fasting insulin x glucose/?? = HOMA-IR) 0.5 to 1.4 is healthy range, >1.9 indicates early insulin resistance, >2.9 significant insulin resistance – [The Blood Code](#)
- **Hip to Waist Ratio** or **Waist to Height Ratio** ([diet doctor](#) or [Mercola](#))

More advanced tests:

- **Kraft Test** (blood glucose and insulin taken every hour after ingesting 75 grams glucose)
- **CAC - Coronary Calcification** - [LLVLC episode 1397](#), [The Fat Emperor](#) , [The Widow Maker movie](#)
- **NMR** - [KetoTalk episode 86](#)
- **Small LDL** (<100 [LLVLC 1330](#)), small LDL under 500: - [LLVLC episode 1330](#)
- **Full Thyroid panel** – [KetoTalk episode 86](#)

Additional Signs of Insulin Resistance (IR):

- **skin tags** - (patho-numonic) KetoTalk episode 30 & [LLVLC episode 1330](#)
- **abdominal obesity** - [LLVLC episode 1330](#)
- **hypoglycemia**, especially reactive hypoglycemia - [LLVLC episode 1330](#)

Links:

The Widow-maker - LLVLC episode 1397, <https://vimeo.com/ondemand/thewidowmakermovie2015>

Keto talk - 10 (<http://ketotalk.com/2016/02/10-autoimmune-disease-constipation-and-supplements-on-keto/>)

KetoTalk - episode 16 (<http://ketotalk.com/2018/07/116-red-itchy-rash-on-keto-low-histamine-diet-fatty-liver-disease-pain-weight-lifting-makes-me-hungry-for-carbs-tingling-tongue/>)

KetoTalk – episode 30 (<http://ketotalk.com/2016/08/30-healing-metabolism-how-much-fat-keto-iv-high-insulin-measuring-insulin-resistance/>)

KetoTalk - episode 86 (<http://ketotalk.com/2017/09/86-diverticulitis-thyroidectomy-impact-on-ketosis-rising-shbg-acidic-urine-ph-on-keto-why-body-preferentially-burns-glucose-over-fat/>)

KetoTalk - episode 112 (<http://ketotalk.com/2018/06/112-exhausted-and-joint-pain-on-keto-no-hunger-and-diarrhea-human-protein-theory-low-glucose-reading-evidence-for-artery-clogging-saturated-fat/>)

KetoTalk - 117 (<http://ketotalk.com/2018/07/117-dr-will-cole-lecture-at-the-2017-autism-education-summit/>)

Keto for Women - episode 27 (<http://www.shawnmynar.com/listener-qa-diet-vs-health-low-carb-purgatory-calories-high-fasting-blood-sugar/>)

LLVLC - episode 1330 (<http://www.thelivinlowcarbshow.com/shownotes/16729/1330-2017-low-carb-cruise-jimmy-moore/>)

LLVLC - episode 1397 (<http://www.thelivinlowcarbshow.com/shownotes/17219/1397-ivor-cummins-dr-jeffry-gerber-2017-low-carb-usa-san-diego/>)

2 Keto Dudes - episode 16 (<http://2ketodudes.com/show.aspx?episode=16>)

2 Keto Dudes - episode 27 (<http://2ketodudes.com/show.aspx?episode=27>)

2 Keto Dudes - episode 77 (<http://2ketodudes.com/show.aspx?episode=77>)

thebloodcode.com (<https://www.thebloodcode.com/calculators/>)

Ivor Cummins – (<http://www.thefatemperor.com/>)

Diet Doctor (<https://www.dietdoctor.com/simple-waist-height-ratio-powerful-health-measurement>)

Mercola.com (<https://articles.mercola.com/sites/articles/archive/2012/11/14/waist-size-matters.aspx>)

Kraft Test (<http://www.thefatemperor.com/blog/2016/8/6/want-to-know-if-type-2-diabetes-is-in-your-future-ok-then?rq=kraft%20test>)

Nasha Winters – (https://www.fleetwoodonsite.com/product_info.php?cPath=40_580&products_id=20031)