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As of now (via his February AMA), he explains his goals are to:

- Increase muscle mass
- Reduce body fat

This is because Peter believes that maintaining muscle mass is important for longevity, and staying physically active late into life.

His approach to hitting his goals are:

- Eating 1 gram of protein per lb of body weight
- Eating 2700 – 2800 calories per day
- Tracking protein and calories via Layne Norton's app called Carbon

This equated to around 45 to 50 grams of protein 4x per day, which he describes as looking like:

- **Breakfast** – usually 8 eggs (4 whole, 4 egg whites) with toast and butter
- **Protein shake** – He takes a shake comprised of 24 ounces of almond milk, 50 grams of protein, and frozen fruit.
- **Lunch** – typically a chicken salad with a variety of vegetables, olive oil and balsamic vinegar
- **Dinner** – varies a lot – but he finds tracking with the app helps him to stay within his goals.
- **Supplements** – he continues to take supplements like omega-3s, magnesium, etc. See this post for more info.

PS - These pages may also be of interest:

[Try This: Optimal Metabolic Health Labs - Dhru Purohit]

https://dhrupurohit.com/optimal-lab-reference-ranges/

From the template in Early:

Category	Biomarker Test	Optimal Range for Males	Optimal Range for Females
Lipids			
	LDL-C (mg/dL)	under <70	<70
Ccc	HDL-C (mg/dL)	mer >50	>50
	Triglycerides (mg/dL)	under <100	<100
	Non-HDL-C (mg/dL)	<80	<80
	VLDL-C (mg/dL)	<15	<15
	TG/HDL-C	<2.0	<2.0
	Total Cholesterol (mg/dL)	in	
Lipoproteins			
	Lp(a) (mg/dL)	<30	<30
	ApoB (mg/dL)	<65	<65
	ApoE (mg/dL)		
Inflammation			
	Homocysteine (µmol/L)	<9	<9
	hs-CRP (mg/dL)	<1	<1
	Uric acid (mg/dL)	<5.0	<5.0
Metabolic			
	Fasting Insulin (µIU/mL)	<6	<6
	Fasting Glucose (mg/dL)		
	HOMA-IR	less than or equal to 1	less than or equal to 1
	OGTT (mg/dL)	Glucose: <140 @ 30'; <120 @ 60'; <100 @ 90' Insulin: <40 @ 30'; <30 @ 60'; <20 @ 90'	Glucose: <140 @ 30'; <120 @ 60'; <100 @ 90' Insulin: <40 @ 30'; <30 @ 60'; <20 @ 90'
	Hba1c (%)	<5.7	<5.7
Sterols			
	Campesterol (mg/L)	2.20 - 4.44	<4.44
	Sitosterol (mg/L)	1.55 - 3.00	1.55 - 3.00

	Lathosterol (mg/L)	0.85 - 2.45	0.85 - 2.45
	Desmosterol (mg/L)	0.85 - 1.45	0.85 - 1.45
Thyroid			
	TSH (µIU/mL)	0.27 - 4.2	0.27 - 4.2
	fT4 (ng/dL)	0.93 - 1.70	0.93 - 1.70
	fT3 (pg/mL)	2.8 - 4.0	2.8 - 4.0
	rT3 (ng/dL)	<12	<12
	ATA (ng/mL)	<1	<1
	ATPA (IU/mL)	<34	<34
Sex Hormones			
	Estradiol (pg/mL)	in 25 - 45	50 - 400
	FSH (mIU/mL)	1.5 - 12.4	Variable
	LH (mIU/mL)	1.7 - 8.6	Variable
	SHBG (nmol/L)	<60	20 - 100
	Testosterone (ng/dL)	350 - 1000	15 - 70
	Free testosterone (ng/dL)	4 - 24	2 - 10
	PSA (ng/mL)	<0.45	
Liver			
	ALT (U/L)	<25	<20
	AST (U/L)	<25	<20
	Total bilirubin (mg/dL)	<1.2	<1.2
Kidney			
	Cystatin C (mg/L)	<1.0	<1.0
	eGFR - Cystatin C (mL/min/1.73m²)	>90	>90
Others			
	Hb (g/dL)	13.5 - 17.5	13.5 - 17.5
	Ferritin (µg/L)	30 - 400	30 - 400
	Omega 3 Index (OmegaQuant)	>10%	>10%
	Vitamin D (ng\ml)	30 - 80 (also,40 to 60)	30 - 80 (also,40 to 60)

Other Tests & Ranges:

Blood Test	Optimal Range (unit)	Source
average 24 hour glucose	85 mg/dl with a standard deviation of 15	average 24 hour glucose
Two-Hour Insulin	less than 30	

A1C (aka HbA1C)	According to his book, less than 5.1%; preferably less than 4.9 (lower is better) L According to the Attia Chatbot, 4-5.5% of total Hgb	
APoA1		
LDL-P		
Lp-PLA2 (lipoprotein associated phospholipase A2)		
Triglycerides	less than 50 or 1:1 ratio with HDL	
Triglycerides-to-HDL ratio		
Omega 3 Index	greater than 8%	
Hematocrit	34% to 46.6%	Attia Chatbot
MCH (mean corpuscular hemoglobin)		Attia Chatbot
Total Protein	•	Attia Chatbot
Uric Acid		https://podcastnotes.org/2020/02/08/peter-attia-stem-talk-healthspan-longevity-lifespan/
Waist Size		
Sauna Usage Time/Temp		https://youtu.be/ExZ9JF69px0?t=117

Attia's workout schedule

On an episode of *The Drive*, Attia shares how he fills all four buckets throughout the week:

- Monday: 10 minutes stability, 60 minutes lower body strength
- Tuesday: 10 minutes stability, 60 minutes zone 2
- Wednesday: 10 minutes stability, 60 minutes upper body strength
- Thursday: 10 minutes stability, 60 minutes zone 2
- Friday: 10 minutes stability, 60 minutes lower body strength
- Saturday: 10 minutes stability, 60 minutes zone 2, 30 minutes zone 5
- Sunday: 10 minutes stability, 60 minutes zone 2, 60 minute upper body strength

Peter Attia Supplements List – What He Takes & Why

Daily Supplements

- Omega-3 Fish Oil – 2 grams per day
- Vitamin D – targets 40 – 60 ng/ml blood level of 25-hydroxy vitamin D
- Magnesium – multiple types per day, up to 1 gram total
- Protein Powder – 1 shake per day
- Green Powder – AG1 – 1 scoop per day

Sleep Supplements:

Taken regularly:

- Glycine – 2 grams prior to sleep
- Ashwagandha – 600 mg prior to sleep
- Magnesium L-Threonate – 2 capsules prior to sleep

Taken occasionally for jet lag, to sleep early:

- Melatonin – 2 to 5 mg
- Phosphatidylserine – 400-600 mg

Maintaining Cognitive Function

- Curcumin Extract – Theracurmin

Prescription Drugs:

- Rapamycin – for longevity
- Statin & PCSK9 Inhibitor – for reducing cardiovascular disease risk

For a detailed breakdown of what else this article covers, see the table of contents belo

Daily Supplements

Omega-3 Fish Oil

Peter says he recommends 2 brands of fish oil for his patients (source 54m 30s of #83) : Nordic Naturals and Carlson

Vitamin D

- Thorne 1,000 IU and 5,000 IU capsules
- Jarrow 1,000 IU and 5,000 IU capsules

Magnesium

- 400 – 500 mg of Magnesium Oxide or Citrate
- 2 tablets of Magnesium Chloride (~143 mg)
- 2 capsules of Magnesium L-Threonate before bed (~96 mg)

Peter categorizes magnesium into 3 broad categories:

- Carlson – Magnesium Oxide – 350 mg capsules
- NOW – Magnesium Citrate – 200 mg capsules
- SlowMag, which is designed for slow-release and to remove stomach upset sometimes experienced with magnesium supplementation.

Jarrow – Magnesium L-Threonate Ng– 90 x 144 mg servings

NOW – Magnesium L-Threonate – 90 x 144 mg servings

Protein Powder

- Xtend Pro – 100% Whey Protein Isolate – Flavoured
- California Gold Nutrition – 100% Whey Protein Isolate – Unflavored & Flavored

Sleep Supplements

- Double Wood – Glycine – 500 mg capsules (see 15% off coupon code)
- Life Extension – Glycine – 1,000 mg (1g) capsules
- NOW – Glycine – 1,000 mg (1g) capsules

Ashwagandha

Brand and dose: Whilst Peter didn't mention the brand he takes, he did say he takes 600 mg prior to bed. Given the size of the dose, it might be KSM-66.

- Jarrow – Ashwagandha (KSM-66) – 300 mg per capsule
- Natural Factors – Ashwagandha (KSM-66) – 600 mg per capsule (out of stock)
- Life Extension – Ashwagandha (Sensoril) – 125 mg per capsule

Magnesium L-Threonate

- Jarrow – Magnesium L-Threonate – 90 x 144 mg servings
- NOW – Magnesium L-Threonate – 90 x 144 mg servings

Peter's Jet Lag Protocol

He describes 3 variables that help drive sleep:

- **Adenosine** – more adenosine = easier to sleep
- **Melatonin** – more melatonin = easier to sleep
- **Cortisol** – less cortisol = easier to sleep

How to increase adenosine?

Peter does this without supplements.

He tries to do a lot of exercise early in the morning of the day in question. Then additionally, avoids coffee and other caffeine sources, which can block adenosine receptors.

How to increase Melatonin?

Melatonin

Generally Peter avoids taking melatonin for sleep, but when it comes to jet lag, where if he does nothing, his sleep will be disrupted anyway, he chooses to use it.

For his jet lag protocol, if he needs to help induce sleep early, he will “slam himself” with **2 to 5 mg**.

Examples of melatonin supplements include:

- Life Extension – Melatonin 1 mg
- NOW – Melatonin 1 mg

How to decrease cortisol?

By default, early in the day our cortisol is elevated, and by the evening our cortisol level has decreased.

This can be difficult to regulate without some sort of exogenous compound.

In this instance, Peter chooses to decrease his cortisol levels through the use of a supplement called Phosphatidylserine.

Phosphatidylserine

Peter describes phosphatidylserine as an “incredibly potent” supplement, part of his jet lag protocol, that he doesn’t use regularly.

For his jet lag protcol, Peter will take **400 to 600 mg** of phosphatidylserine – to shut down his adrenals, reduce cortisol, and encourage sleep.

Brands of phosphatidylserine include:

- Jarrow – Phosphatidylserine – 100 mg
- NOW – Phosphatidylserine – 100 mg

Phosphatidylserine's Mechanism of Action

> Rather than phosphatidylserine’s efficacy just being a “wives tale”, it has been studied reasonably well.
>
> Mechanistically it lowers physiological stress by blunting the adrenocorticotropic hormone (ACTH) response to stress – and it’s ACTH that under stress then stimulates the release of cortisol via the adrenal gland.
>
> By lowering physiological stress levels, this may help relaxing into sleep.

- He increases adenosine through lots of early morning exercise and caffeine abstinence
- He increases melatonin by taking **2 to 5 mg of melatonin**
- He decreases cortisol by taking **400 to 600 mg of phosphatidylserine**

Maintaining Cognitive Function

- A Curcumin extract called Theracurmin (6 out of 10 rating*)
- Cocoa extract (no rating given* – but suggests it *may* benefit those with insulin resistance or hypertension the most)

- Magnesium L-Threonate (2 out of 10 rating*)

Briefly, regarding cocoa extract, Peter discusses 3 studies, all involving elderly people, which showed cognitive benefits at dose of 500 mg and upwards per day:

- CoCoA study – 2012
- CoCoA study – 2014
- COSMOS study

An example of a high quality cocoa extra is Cocoavia which comes in 500 mg and 750 mg versions. For 15% off, use this coupon code.

Rhonda Patrick is a fan of this brand, in part due to its ultra low heavy metal content, which can be an issue with cocoa products. I've written more about it here.

Theracurmin

Peter's team gives Theracurmin the highest score (6 out of 10) for evidence, and says you can make the case for patients who have inflammation or maybe even patients who are in the earliest stages of mild cognitive impairment (MCI).

He cites two studies that he found particularly convincing. The first was an 18-month study of 40 subjects, without dementia, where half took 90 mg of Theracurmin 2x per day (180 mg total), and the other half placebo.

The Theracurmin group showed improvements in memory and attention scores, in tandem with brain imaging that showed decreases in amyloid and tau accumulation in brain regions modulating mood and memory.

The second study he mentions looked at patients with Alzheimer's disease and mild cognitive impairment (MCI). They took 180 mg per day, and their cognitive function largely remained stable (n = 36), versus the placebo group (n = 57) who noticeably continued their decline.

More info on Theracurmin

In terms of what Theracurmin actually is… it's is a more bio-available form of curcumin, the main active ingredient in turmeric.

Curcumin's mechanisms of action include:

- Anti-inflammatory
- Antioxidant properties 
- Amyloid-beta plaque reduction
- Neurogenesis promotion
- And more! It's a compound that effects a lot of different biological pathways.

More research is needed to confirm which of these mechanisms are primary in relationship to brain health.

^ Mechanisms of curcumin – image source

Theracurmin is a patented formula, and the marketing quotes 27x more bioavailability than standard curcumin. Which is apparently achieved through shrinking the particle size and then combining with a gum called "gum ghatti".

This study (especially if you can get the full paper) gives more insight into the creation and properties of Theracurmin.

My personal take is that there are multiple methods of increasing the bio-availability of curcumin, some more expensive than others. Peter has gone with the type that has the best clinical evidence in his view, which makes sense. However, it's expensive, and unlikely to hold the monopoly on these beneficial effects.

For example, see table 1 of this article, which examines other curcumin formulations and the number of studies they've been used in.

Peter didn't mention the exact dose, frequency or brand of Theracurmin he takes. However, we know the two studies cited used either 90 or 180 mg daily, with 180 mg being a high dose.

Types of Theracurmin include:

- Natural Factors – Theracurmin – 30 mg per capsule
- Natural Factors – Theracurmin – 60 mg per capsule
- Source Naturals – Theracurmin – 60 mg* per capsule

* Note that Source Naturals market the product as 600 mg, but my understanding is that it actually yields 60 mg of curcumin per capsule – which is a lot less, and thus misleading marketing.

Prescription Drugs

Rapamcyin

Kevin Rose (left) and Peter Attia (Right)

Peter first announced on a 2018 podcast with Kevin Rose that he had started taking Rapamycin (see approx. 52m 15s of the podcast). Some years later, he continues to take it.

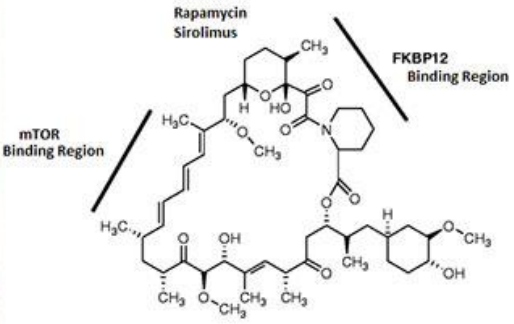
The last mention I have of doses, he was taking ~6 milligrams once per week. Initially he was doing it 8 weeks on rapamycin, 6 weeks off.

However, in a September 2021 interview with Matt Kaeberlein he says that more recently he has decided to stop taking the breaks, and instead now takes it every week. See 1:32:38 of the interview on YouTube for where he mentions this.

He notes that this was a non-data backed decision.

In terms of unwanted side-effects, Peter notes that it gives him occasional aphthous ulcers. He also notes that his finger nails grow slower whilst taking it. Besides that, he doesn't notice any other day-to-day differences from the drug.

He mentions in AMA 11 that he does not take rapamycin whilst fasting.



Sirolimus is the USAN-assigned generic name for the natural product rapamycin

About Rapamycin

Rapamycin is a prescription drug that is FDA approved for use as an immunosupressor. When taken daily, it stops the bodies of transplant patients from rejecting their new organ.

Despite this potential, there haven't been any studies of its lifespan/healthspan benefits in humans yet. Two potential reasons are:

- Rapamycin isn't under a patent.
- The FDA do not recognize ageing as a disease, meaning you'd have to prove rapamycin is effective at tackling a specific disease.

That said, in recent years, there has been substantial interest in the use of rapamycin to tackle ageing. Thus it's likely studies in humans will take place in the coming years.

To	
Cc	
Bcc	
Subject	

Statin & PCSK9 Inhibitor

The latest info I have is that Peter takes a low dose of Pravastatin. He doesn't mention the specific dose.

The source for this is his October 2020 podcast with James O'Keefe (link) – at 1 hour 48 mins.

He goes on to say that he's thinking of experimenting with swapping Pravastatin for Zetia (generic name Ezetimibe) and seeing what changes.

Prior to this Peter was taking Atorvastatin and Ezetimibe, which he mentioned in his 2018 Q&A #2.

Mechanisms of Statin vs Ezetimibe vs PCSK9 – source

PCSK9 Inhibitor

Also in the interview with James O'Keefe (link) – around 1 hour 48 mins – he mentions that he's taking a PCSK9 inhibitor.

He doesn't provide any further info on which type or dose.

Peter's Approach to Multivitamins

Peter personally avoids multivitamins, instead favoring a more targeted approach.

His concern is that they can sometimes contain too much of ingredients you don't need, and not enough of ingredients you do need.

As of now (via his February AMA), he explains his goals are to:

- Increase muscle mass
- Reduce body fat

This is because Peter believes that maintaining muscle mass is important for longevity, and staying physically active late into life.

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- **Supplements** – he continues to take supplements like omega-3s, magnesium, etc. See this post for more info.