

## Case Study 1



### Case Study 1

36 y/o male presented to our office wanting to improve his health, lose body fat, increase strength, increase energy, and build lean muscle. Patient stated he has always been "chunky" with a softer type of build and has never been able to achieve the type of physique that he wanted. He wanted to strive for a more toned physique. He wanted to lose fat and build muscle at the same time. After the initial consultation involving extensive blood work, physical examination and body composition analysis we created his plan. I explained that his plan would have to be accomplished in two separate phases. The first phase would involve decreasing his

body fat without sacrificing muscle mass. The second phase would involve increasing his muscle mass without gaining fat. This had to be accomplished in two phases as the nutritional requirements and physical training techniques to achieve both his goals oppose each other (a common challenge when trying to lose fat and gain muscle simultaneously). We also wanted to use medications that are healthy and would improve his cellular efficiency hence improve his metabolic function. NO STIMULANTS OR AMPHETAMINE-LIKE MEDICATIONS WERE USED.

#### PMH:

- Overweight
- · Childhood Gynecomastia

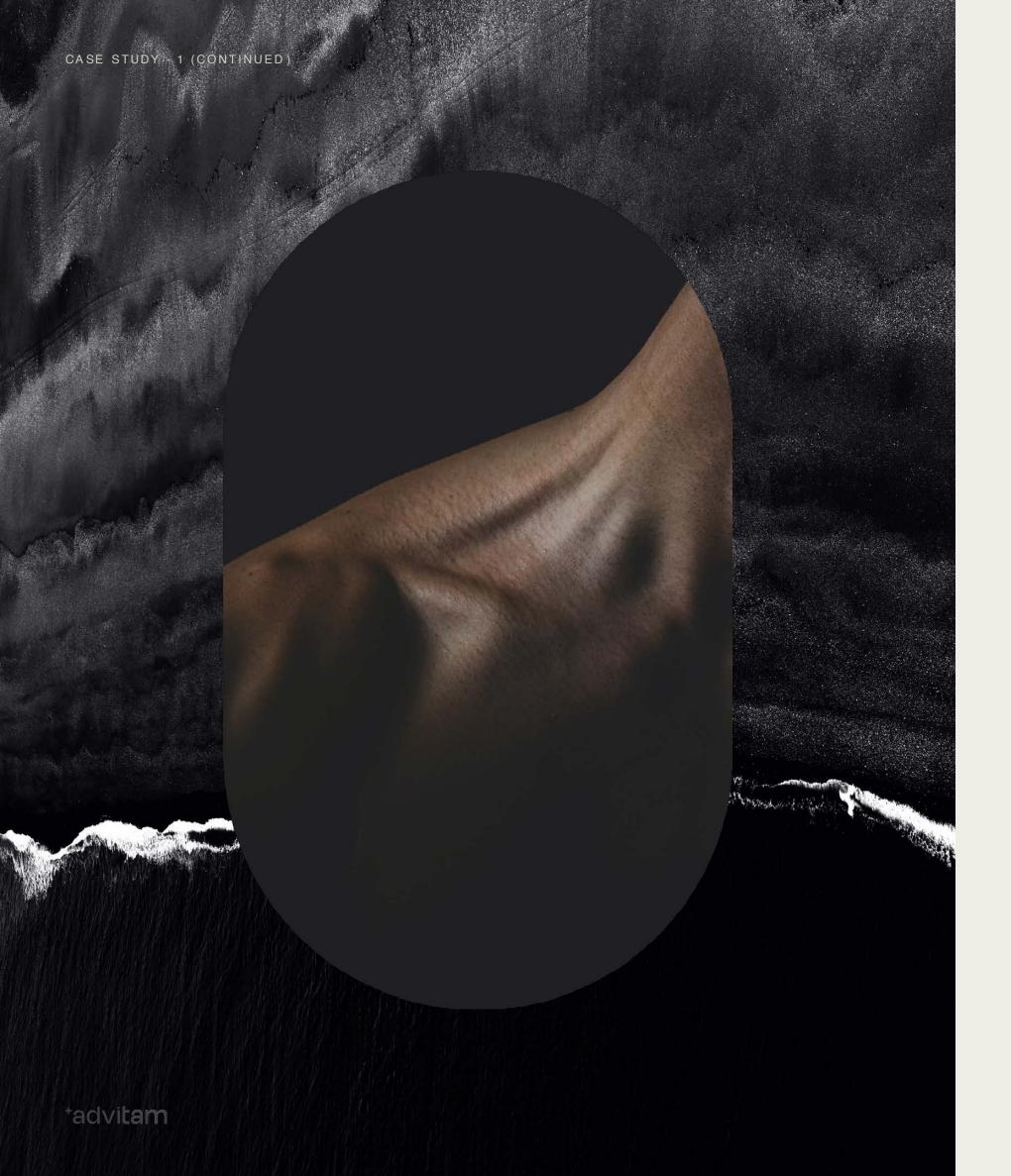
#### MEDS:

None

### Pertinent Labs, Initial blood work 1/21/21:

- ▶ Total serum testosterone 256.17 ng/dL
- SHBG 12.5 nmol/L
- Free testosterone 7.22 ng/dL
- ► Bioavailable testosterone 184 ng/dL (72%)
- ► Estradiol 34.5 pg/mL
- LH 2.61 (range 1.24 8.62)
- ► FSH 6.47
- ► Prolactin 9.8
- ► TSH 1.16
- Free T3 3.6
- ► PSA 0.4
- ► HgA1C 5.4
- ► Fasting Glucose 103
- ► HDL 32
- ► Vit D 23.2





### Case Study 1 (continued)

### Plan:

- 1. Testosterone Cypionate q7d until optimized; changed to split dosing biw
- 2. HCG q7d initially; changed to split dosing biw
- 3. Anastrozole added to counter conversion to estrogen
- 4. CJC1295/Ipamorelin (growth hormone releasing peptides 8wks on 4 wks off
- 5. Added Igf1-LR3 (Long acting Insulin-like growth factor) 8 wks on 4 wks off

### Summary: Patient MF

Date	Total Body Weight (lbs)	Muscle Mass (lbs)	Body Fat (lbs)	Percent Body Fat (%)	Visceral Fat (Levels)
1/2021	193.9	91.5	32.7	16.8	7
3/2021	201.2	97.7	29.9	14.9	6
5/2021	194.1	99.9	19.3	9.9	3
8/2021	168.5	93	5.1	3	1
11/2022	168.6	93.3	5.0	3	1

Total lbs Lost

Total Muscle Gain

25.3lbs

1.8lbs

Total Fat lbs Lost

Total Percent Body Fat Loss Total Visceral Fat Loss

27.7lbs

13.8%

6 Levels Decreased

# :

### Case Study 2

43 y/o female c/o weight gain, decreased energy, decreased motivation, decreased sex drive, decreased vaginal lubrication, poor sleep intermittent fatigue.

After review of bloodwork and imaging studies (mammogram/pelvic ultrasound) and Pap cytology results, the patient opted for our Metabolic Optimization Weight Loss Program, BHRT pellet insertion, and fasting mimicking protocol.



### Current Regimen:

- ► BHRT pellet: Testosterone 100mg
- Oral micronized Progesterone 200mg qHS
- ► Semaglutide 1.0mg q7d
- ► Ipamorelin 15 units (300mcg) 5 days on 2 days off
- Prolon as directed

#### AO

Date	Total Body Weight (lbs)	Muscle Mass (lbs)	Body Fat (lbs)	Percent Body Fat (%)	Visceral Fat (Levels)
07/2021	174.3	63.3	59.4	34.1	12
10/2021	172.1	63.9	56.4	32.8	11
02/2022	156.2	63.1	41.1	26.3	7

Total lbs Lost

Total Muscle Gain

18.1lbs

-0.2lbs

**Total Percent** 

Total Fat lbs Lost

Body Fat Loss

Total Visceral Fat Loss

18.3lbs

7%

5 Levels
Decreased

†advitam

### Case Study 3

55 y/o male Type I diabetic w/ hypertension and hyperlipidemia c/o weight gain, decreased sex drive, decreased strength of erections, intermittent failure of erections, decreased energy, poor sleep habits, and daytime sleepiness. He exercises 5-7 days/ week consisting of weight training, cardiovascular training and HIIT.

#### Medications:

- Fiasp (short acting insulin)12 units w/ meals TID
- ► Tresiba (long acting insulin) 42 units @HS
- Jardiance 10mg po qd
- Losartan 100mg po qd
- Atorvastatin 20mg po qd
- HCTZ(hydrochlorothiazide)12.5mg po qd

### Initial Labs (hormone only):

- ► Total Serum Testosterone 386 ng/dL
- ► Free Testosterone 8.03 ng/dL
- Estradiol 30 pg/mL
- ► SHBG 20
- ► LH 3.2 mIU/mL
- FSH 11.3 mlU/mL
- Prolactin 10 ng/dL







### Current Regimen:

- Testosterone Cypionate 140mg IM q7d
- ► HCG 250iu SC q7d
- Anastrozole 0.5mg po qd

### Summary: Patient MF

Date	Total Body Weight (lbs)	Muscle Mass (lbs)	Body Fat (lbs)	Percent Body Fat (%)	Visceral Fat (Levels)
03/2021	245.8	87.5	85.5	34.8	19
07/2021	234.1	91.9	73	31.2	15
09/2021	223.4	90.4	64.7	28.9	13
12/2021	217.2	88	62	28.5	13
02/2022	215.9	88.6	59.6	27.6	12

Total lbs Lost

Total Muscle Gain

29.9lbs

1.1lbs

Total Fat lbs Lost

25.9lbs

Total Percent Body Fat Loss

7.2%

Total Visceral Fat Loss

7 Levels
Decreased

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