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Empower The Woman

- ❖ **Its not about replenishing one hormone**
- ❖ **It's about a harmonious interaction of hormones working together**
- ❖ **Cortisol rising towards the peak of the normal range can easily spiral out of control**
- ❖ **Free T3 close to the bottom may signify the insidious onset of hypothyroidism.**
- ❖ **A preventive perspective focuses on the rate of differentiation, observing the degrees of minor imbalances within normalcy, before they are exacerbated into a medical disorder.**

# Hormonal Imbalance

Stepping on shaky ground



## How to get rid of visceral fat: a randomised double-blind clinical trial

### Abstract

Inflammation and oxidative damage are immanent in visceral adiposity that is characterised by excess lipids and lipoproteins, viewed as the core components of arterial plaques, ultimately obstructing blood flow and lymphatic drainage. Accumulated toxicity dysregulates the orexigenic hormone ghrelin and anorexic hormone leptin, which are part of a reciprocal network controlling appetite. Weight gain promotes hormonal imbalance, expressed in disturbances in free T3 and an inverse low testosterone/high cortisol incongruity that provokes stress-eating behaviours. We explored a number of interventions designed to reduce visceral adipose tissue (VAT), including radiofrequency, lasers and exercise, as well as exercise alone. Short-term gymnastics evidenced a modest advantage in VAT decrease, but there were no changes in body mass index (BMI) or physical appearance. Overtraining appeared to negate the benefits of exercise by increasing inflammation and cortisol, while suppressing testosterone and leptin, which inevitably instigated hunger and weight gain. We examined the blood samples of 10 overweight, healthy adults who underwent 12 treatments during the course of 1 month. Results demonstrated a statistically significant decline in very-low-density lipoprotein, triglycerides and VAT, accompanied by a substantial increase in basal metabolic rate and skeletal muscle mass. Importantly, free T3, insulin-like growth factor 1, leptin, and testosterone were elevated towards the top of the normal range, while cortisol and ghrelin gravitated towards the low end of the normal range, without ever spiking outside the limits of hormonal balance.

### Key words

- ▶ Low-level laser therapy ▶ Body contouring
- ▶ Visceral adipose tissue reduction

The weight-regulating hormone leptin is the antagonist of ghrelin, the orexigenic hormone that stimulates appetite. Research has shown that ghrelin-producing cells seem to be more abundant in morbidly obese patients (Abdemur et al, 2014). Ghrelin is secreted in the stomach and is inhibited by the satiety effects of leptin that functions as a feedback signalling



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mechanism mediated by the hypothalamus (Yildiz et al, 2004). From an intuitive point of view, decreasing ghrelin and increasing leptin may be the apparent target of weight loss methods. However, there is a fine line between altering leptin/ghrelin concentrations and unsettling the hormonal balance that usually precipitates weight gain. Unwarrantable ghrelin decrease and leptin increase may also impose a health risk. Ghrelin is expressed in human T cells and monocytes to inhibit the expression of pro-inflammatory anorectic inflammatory cytokines, such as IL-1 $\beta$  and IL-6, which are implicated in chronic low-grade inflammation and aging (Hart, 1988; Ershler and Keller, 2000; Dixit et al, 2004). Regulation of inflammatory cytokines by normal levels of ghrelin may be crucial in preventing inflammation. Health is hormonal balance-contingent. Therefore, optimal levels of ghrelin are necessary to regulate persistent inflammation leading to ageing and disease. Symptom-targeted weight loss that imbalances hormones and increases oxidative damage, toxicity and inflammation is not only a health risk, but pointless, since inflammation and hormonal imbalance will negate all attained benefits, leading to weight gain rebound. Weight loss-targeting interventions, either for health or aesthetic purposes, cannot be merely based on the restricted perspective of symptom elimination. Practitioners should adopt an enriched frame of reference centred on overall physical health.

Principally, obesity, oxidative damage and inflammation are inherent in most pathological conditions, including diabetes, cardiovascular disease (CVC) and even COVID-19. Furthermore, reports suggest that a high percentage of the population who will contract COVID-19 will also have a BMI of 25 and over, and more than 73.4% of COVID-19 patients in intensive care are classified as overweight (Davenport and Nainggolan, 2020; Osborne, 2020). The common denominators of inflammation-compromised health are adiposity, excess very-low-density lipoprotein (VLDL) and triglycerides, metabolic dysfunction and dysregulation of appetite-controlling hormones, leptin and ghrelin, reinforcing excess food consumption. Inflammation is at the core of susceptibility to illness and increased

Table 4. Results on BMR increase and weight loss in KG

Gender	BMR before	BMR after	Percentage increase	Weight before (Kg)	Weight after (Kg)	Kg decrease
Male	1505	1585	80%	93.4	88.3	5.1
Male	1854	1969	115%	86.7	80.4	6.3
Female	1210	1386	176%	63.4	58.9	4.5
Female	1414	1626	212%	59.5	53.6	5.9
Male	1821	1933	112%	97.2	86.5	10.7
Male	1743	1784	41%	89.6	83.7	5.9
Female	1266	1316	50%	61.3	58.2	3.1
Female	1195	1243	48%	67.8	62.3	5.5
Male	1894	1937	42%	98.4	88.9	9.5
Female	1237	1276	39%	59.3	52.6	6.7

Note: BMR showed a consistent increase after the 12 treatments. The average weight loss was 6.32 kg

their post-treatment results. There was an inverse testosterone/cortisol relationship where testosterone increased while cortisol decreased within the normal range. Testosterone increase reflected a p-value of  $p=0.00157$ . For cortisol decrease, the p-value was  $p=0.00041$ . The findings contradicted the results of strenuous exercise where cortisol increase is accompanied by testosterone decrease. Upon further examination, it became evident that testosterone increased by 90.04% in females, while males demonstrated a 35.36% testosterone rise. Since testosterone elevations did not spike outside the normal range in both genders, this substantial difference between males and females may be an artefact of the inherently lower female testosterone levels.

Table 1 reveals that IGF-1 increased by 25.8% after the 12 treatments. As expected, SMM also increased significantly by an average percentage of 36.45%.

Table 2 displays a 30.34% average decrease in

visceral adipose tissue. After the 12 treatments, free T3 was elevated towards the peak of the normal range with an average percentage increase of 30%.

Table 3 depicts a 6% average leptin increase and an average -8.75% decrease in ghrelin.

BMR showed a consistent increase after the 12 treatments. The average weight loss was 6.32 kg (Table 4).

All other variables' highly statistical significance values are displayed in Table 5. Importantly, all hormonal increases and decreases remained within the normal range.

IGF-1 increased by 25.8% after the 12 treatments. As expected, SMM also increased significantly by an average percentage of 36.45%.

Subjects reported that they experienced a large variety of 8-second long vigorous contractions, some of them resembling resistance exercises, while others were subjectively perceived as body twists or fast-paced aerobics. Contractions were painless,

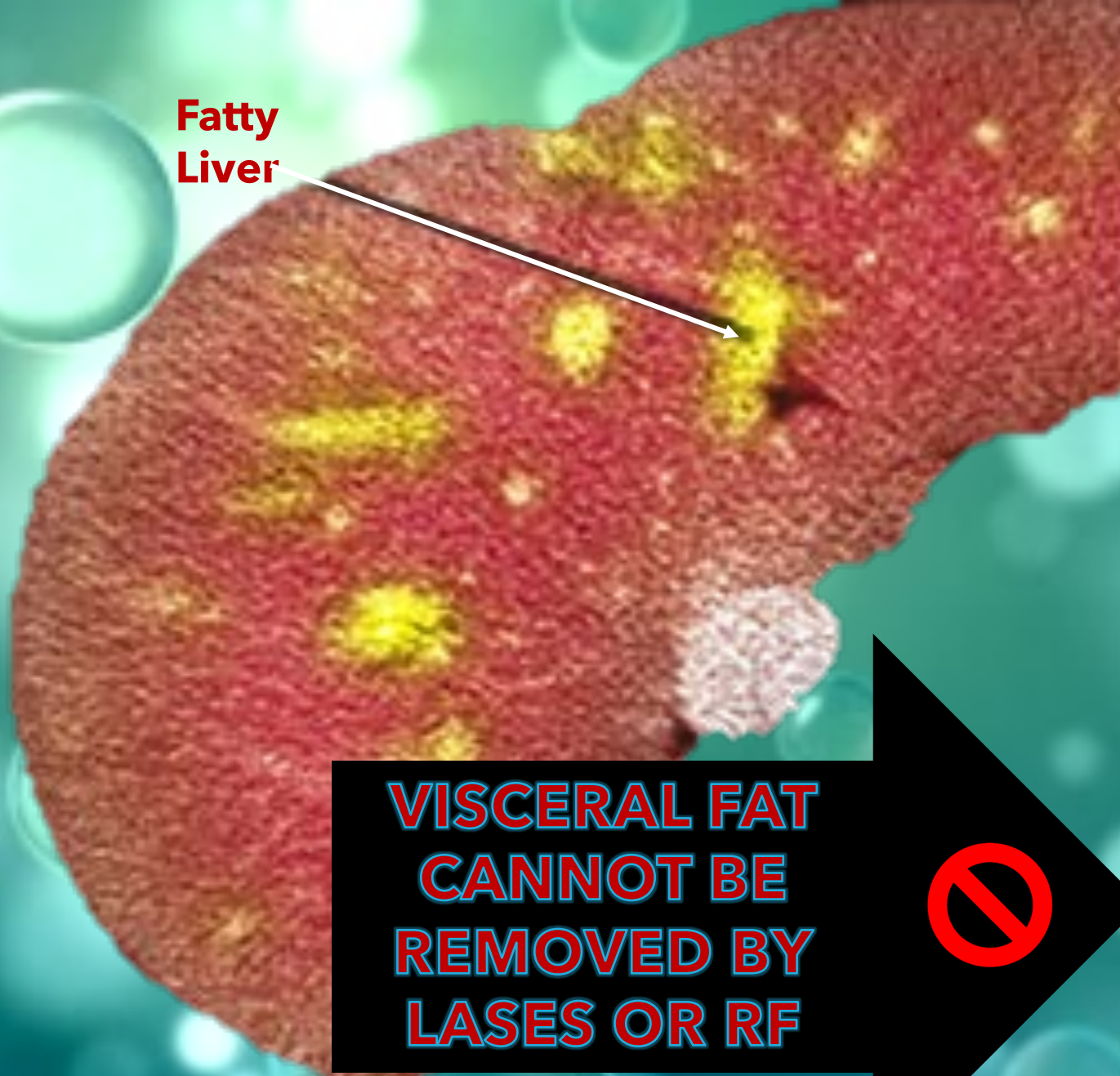
Table 5. T-tests statistical significance results on blood tests and measurement variables

	Mean	S2 =SS/df	S2M = S2/N	SM = $\sqrt{S2M}$	T value	p value	Probability
VLDL	-0.77	0.09	0.01	0.1	-7.95	<0.00001	$P<0.00001$
Triglycerides	-0.67	0.26	0.03	0.26	-4.2	0.00115	$P<0.01$
Free T3	1.11	0.08	0.01	0.09	12.1	<0.00001	$P<0.00001$
Leptin	0.61	0.06	0.001	0.08	7.69	0.00002	$P<0.0001$
Ghrelin	-55	929.29	92.93	9.64	-5.73	0.00003	$P<0.0001$
Cortisol	-12.2	59.96	6.0	2.45	-4.98	0.00028	$P<0.001$
Testosterone	2.46	6.14	0.61	0.78	3.14	0.006	$P<0.01$
VAT	-32.43	47.62	4.76	2.18	-14.86	<0.00001	$P<0.00001$
SMM	8.47	0.89	0.09	0.3	28.39	<0.00001	$P<0.00001$
IGF-1	5.27	1.47	0.15	0.38	13.72	<0.00001	$P<0.00001$
Weight (Kg)	-6.52	5.69	0.57	0.75	8.78	<0.00001	$P<0.00001$
BMR	91.6	3782.04	378.2	19.45	4.71	0.00055	$P<0.001$

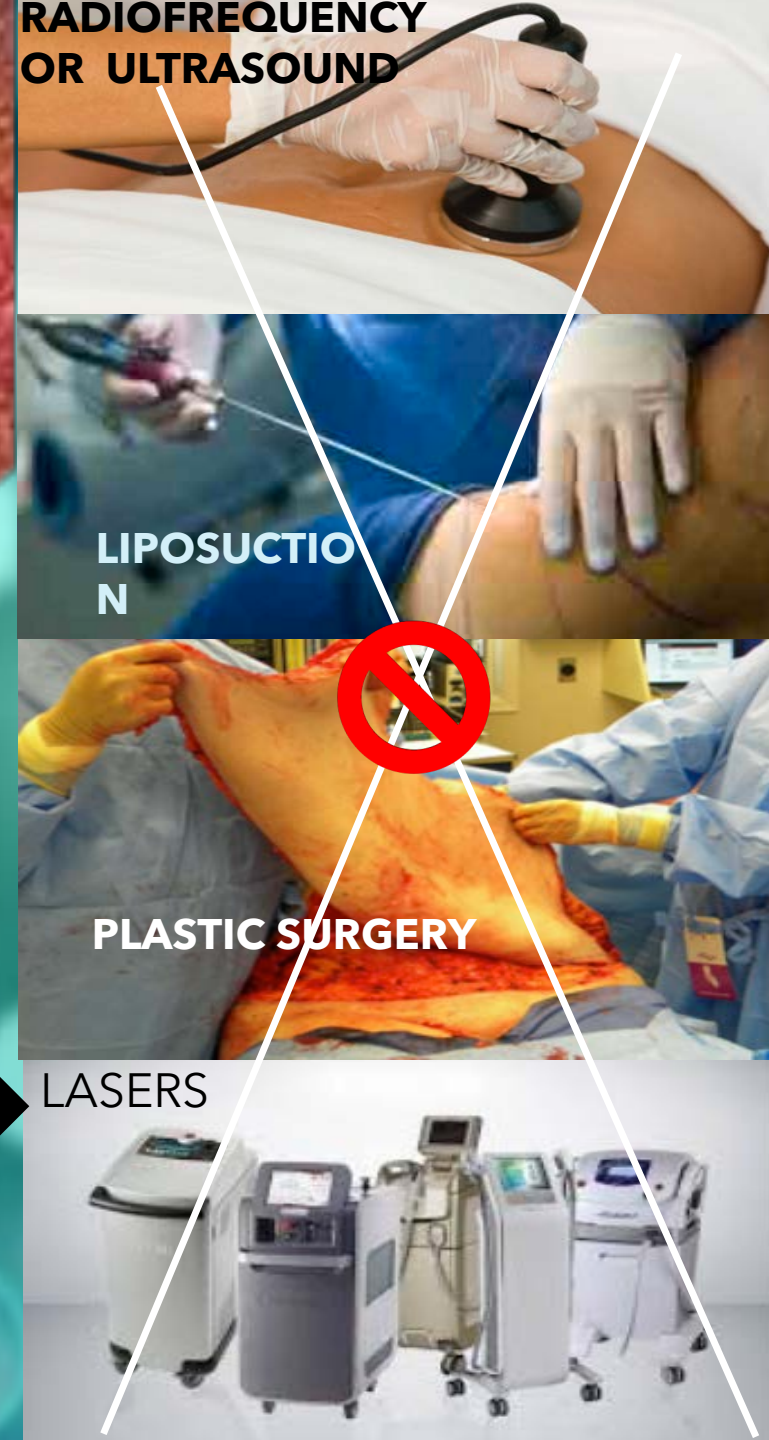
New Technology that Increases BMR

Results on BMR Increase and Weight Loss in KG						
GENDER	BMR PRE	BMR POST	% Increase	WEIGHT PRE KG	WEIGHT POST KG	KG Decrease
MALE	1505	1585	80%	93.4	88.3	5.1
MALE	1854	1969	115%	86.7	80.4	6.3
FEMALE	1210	1386	176%	63.4	58.9	4.5
FEMALE	1414	1626	212%	59.5	53.6	5.9
MALE	1821	1933	112%	97.2	86.5	10.7
MALE	1743	1784	41%	89.6	83.7	5.9
FEMALE	1266	1316	50%	61.3	58.2	3.1
FEMALE	1195	1243	48%	67.8	62.3	5.5
MALE	1894	1937	43%	98.4	88.9	9.5
FEMALE	1237	1276	39%	59.3	52.6	6.7
Mean Average BMR Increase.			<b>97.44</b>	Mean Average Weight Loss		<b>-6.32</b>

**Fatty Liver**



**VISCERAL FAT  
CANNOT BE  
REMOVED BY  
LASES OR RF**



**RADIOFREQUENCY  
OR ULTRASOUND**

**LIPOSUCTIO  
N**

**PLASTIC SURGERY**

**LASERS**



AARON/ISTOCK

The study included 10 healthy adults and took place in three different private aesthetic clinics in separate countries

mortality. Recent research reports that patients with viral infections, including COVID-19, do not develop a high 'viral load' but a 'cytokine storm' syndrome, an immune reaction in which the body releases too many cytokines into the blood, resulting in hyperinflammation that turns out to be lethal for the patient. During this inflammatory state, interferons trigger cascades of antiviral activity; however, in the process, they shut down host protein synthesis, inducing cell death (Tanaka et al, 2014; Ruan et al, 2020). Systemic balance and moderation, including hormonal levels within the normal range, appear to be an essential requirement for optimal health.

So, what is the solution for those that have already accumulated excess visceral adiposity, along with its inherent inflammatory toxicity and hormonal imbalance? Very few clinical trials use lasers for visceral fat reduction. In one trial, low-level laser therapy (LLLT) was offered to women aged 20-40 years old with BMI  $\geq 30$  kg/m<sup>2</sup>. LLLT was delivered for 16 minutes after subjects completed 1 hour of aerobic and resistance exercises. The combination of LLLT and physical training was offered three times weekly for 16 weeks. Results revealed a statistically significant reduction in neck and waist circumferences, which, however, do not represent the main sites of visceral adipose tissue (VAT) concentrations. These investigators report visceral fat decrease based on a conductance instrument, as well as leptin decrease after the 16 combined treatments (Duarte et al, 2015). The inclusion of a placebo group increases the study's validity; however, there was no experimental group using LLLT alone. Therefore, it is not clear whether the VAT outcome was the result of the LLLT

treatment or the exercise. Moreover, there was no substantial evidence confirming that these subjects were leptin-resistant to justify the observed leptin suppression, or whether the decrease of the weight-regulating hormone was the result of increased energy expenditure due to exercise, triggering the need for more food consumption. A similar clinical trial was conducted with women 20-40 years old and with BMIs of 30-40 kg/m<sup>2</sup>, who were treated with a combination of LLLT and exercise three times a week for 4 months, and reportedly yielded a reduction in interleukin 6 (IL-6) and an increase in WNT5 signalling. However, no differences in visceral fat, lean mass, VLDL, LDL, and triglycerides were demonstrated between the experimental and control groups (da Silveira Campos et al, 2018).

Radiofrequency studies on VAT reduction are sparse and present methodological limitations. The Cairo University clinical trial published in the Bulletin of Cairo University (Sabbour et al, 2009) used cavitation ultrasound therapy (CUT) on 50 perimenopausal women aged between 37-39 years with a BMI of 31.5-40.04 kg/m<sup>2</sup>. The experimental group that received CUT treatments plus a low-calorie diet for 3 months was compared to a control group that was only given the low-calorie diet for the same period. They report significant differences in both of the groups' weight, waist and hips circumferences, BMI, triglycerides, low-density lipoprotein (LDL) and high-density lipoprotein (HDL), with the CUT group showing an advantage in overall body fat loss, as well as a decrease in triglycerides and LDL. These investigators report a decrease of VAT based on the CUT group's advantage of overall fat reduction. However, they present no

## METHODOLOGICAL PROBLEMS IN the few Published LASER AND RADIOFREQUENCY STUDIES

### 1. Duarte et al (2015 / 2018) Used Low level laser therapy COMBINED with aerobic plus resistance training

<https://doi.org/10.1016/j.jphotobiol.2015.08.026>  
doi: 10.1007/s10103-018-2465-1

#### Problems:

- No abdomen measurements
- No LLLT group alone / Impossible to determine whether results were due to LLLT or exercise
- Women under 40.
- Replication study found no differences in Visceral fat

### 1. 2. Sabbour et al (2009) Used Cavitation Ultrasound Therapy (Bull. Fac. Ph.Th. Cairo University, Vol 14, No (1) Problems:

- Not published in a peer review journal
- They report overall fat and not visceral fat on the basis of a conductance scale

London University Technology (not a laser not RF) 12 treatments Normal Adults. Results on Visceral Adipose Tissue and Blood Test Results on Free T3 for each subject.							
GENDER	VISCERAL FAT PRE	VISCERAL FAT POST	% Decrease	FREE T3 PRE (nmol/L)	FREE T3 POST (nmol/L)	Normal Range (nmol/L)	% Increase
MALE	139.30	93.80	32.66%	2.98	4.22	2.63-5.7	41%
MALE	102.20	69.30	32.19%	3.69	4.98	2.63-5.7	34.95%
FEMALE	93.50	58.30	37.64%	4.77	5.37	2.63-5.7	12.5%
FEMALE	85.50	61.40	28.30%	4.56	5.31	2.63-5.7	16.44%
MALE	76.40	48.80	36.12%	4.15	5.47	2.63-5.7	31.80%
MALE	118.60	89.30	24.70%	3.29	4.86	2.63-5.7	47.7%
FEMALE	98.80	70.60	28.54%	4.36	5.64	2.63-5.7	29.35%
FEMALE	102.70	77.30	24.73%	3.66	4.79	2.63-5.7	30.87%
MALE	145.30	104.34	28.18%	3.19	4.12	2.63-5.7	29.15%
FEMALE	109.80	74.67	31.99%	4.09	5.12	2.63-5.7	25.18%
<b>Mean Average Visceral Fat % Decrease</b>		<b>30.34%</b>		<b>Mean Average Free T3 % increase</b>			<b>30%</b>



This website is intended for healthcare professionals

Journal of Aesthetic Nursing, Vol. 9, No. 5 · Clinical

## Gain without pain: beyond sport effortless exercise solutions

Xanya Sofra

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### Abstract

Ageing is associated with decreased metabolism, increased toxicity, decreased skeletal muscle mass (SMM) and increased visceral fat deposits that compromise the normal functioning of vital organs such as the liver, pancreas and intestines, increasing the risk of a number of health problems, including type 2 diabetes, coronary heart disease, hypertension and non-alcoholic fatty liver. Visceral adipose tissue holds large amounts of toxins that alter thyroid hormone metabolism, lowering resting metabolic rate (RMR). Strenuous physical exercise can reach these deeper visceral adipose tissue layers. However, excessive exercise is necessary to reduce visceral adipose tissue elevates cortisol while decreasing testosterone. The hormonal imbalance resulting from this inverse cortisol/testosterone relationship ultimately leads to weight gain, despite all the efforts invested in physical activity. On the other hand, lack of exercise allows for accumulation of toxicity and increased vulnerability to chronic physical disorders. Energy-based technologies report successful results in reducing subcutaneous fat layers; however, data is not currently available about methods that can reduce deeper visceral adipose tissue and relieve the system from visceral fat cells stuffed with excess triglycerides. In this study, we examined hormone and cholesterol fluctuations in the blood tests of eight subjects undergoing six 45 minutes of effortless exercise sessions with a novel London University invention. We also explored changes in their visceral adipose tissue, overall body fat mass, SMM, basic metabolic rate (BMR), waist and abdomen reduction in centimetres (cm) and overall weight loss in kilograms (kg). Subjects' results revealed a statistically significant increase in triiodothyronine (Free T3), accompanied by a significant decrease in the very low-density lipoprotein (VLDL) and triglycerides. Cortisol did not show statistically significant fluctuations. There was a statistically significant decrease in visceral adipose tissue and overall body fat mass and a statistically significant increase in SMM. Waist and abdomen cm loss, and weight loss in kgs were statistically significant, demonstrating a substantial decrease in cm and kgs in all subjects that persisted a week after the last treatment. Results of this study supported the hypothesis that this method of effortless exercise can reduce both overall body fat mass, visceral adipose tissue and VLDL, while increasing SMM and the metabolic hormone free T3, without the aid of diet or change in lifestyle.

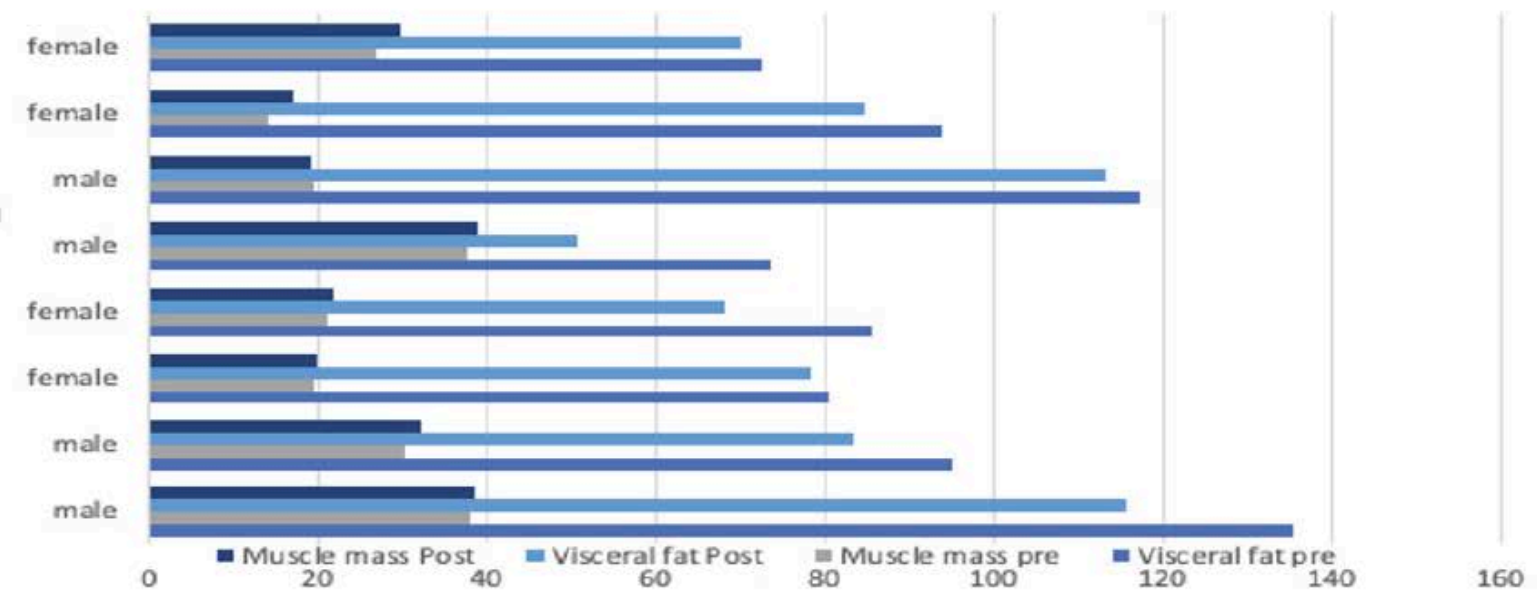


Figure 1. The before and after significant reduction in visceral adipose tissue and the significant increase in SMM

toxins can explain the global obesity epidemic because of the exponential production and usage of synthetic organic and inorganic chemicals that may have damaged many of the body's natural weight-control mechanisms (Baillie-Hamilton, 2004).

### Toxins

Toxins alter thyroid hormone metabolism lowering resting metabolic rate (RMR). Hepatic detoxification systems are overloaded by toxicity, which promotes insulin resistance and disorganises hypothalamic satiety modulation of central inhibitors and stimulators of appetite, including leptin that induces satiety and fat burning, and cortisol, which has

been strongly related to caloric intake and total consumption, triggering stress eating behaviors (Hyman, 2007; George et al, 2010). Toxicity interferes with all fat-burning hormones, such as insulin (lowers blood sugar by storing glucose in adipocytes), ghrelin (stimulates hunger and fat storage) and adiponectin (lowers blood sugar and burns fat). The resulting hormonal imbalance increases hunger. The vicious circle starts with toxicity triggering hunger increase that leads to increased fat deposits that store toxins leading to more hunger and more weight gain. This vicious circle is intensified with age when BMR and RMR decrease, turning weight loss into a losing battle. The reason why both BMR and RMR decrease

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Adverse Effects of Sedentary Lifestyles: Inflammation, and High-Glucose Induced Oxidative Stress

—A Double Blind Randomized Clinical Trial on Diabetic and Prediabetic Patients

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ABSTRACT

Sedentary lifestyles promote adipose tissue accumulation that generates systemic inflammation and oxidative damage. Physical activity induces cardiovascular fitness, increases muscle mass, and healthy blood glucose regulation, while reducing visceral fat, triglycerides and low-density lipoproteins. It is theoretically possible to develop a long-term multi-exercise regimen for health management and enhancement. Pragmatically, time and career restraints, individual choices, genetic factors, or demoralization due to the draconian commitment involved in weight loss, have rendered over a billion of individuals obese, or overweight, burdened by excess lipids, insulin resistance, elevated glucose levels, and inflammation, that foster a number of medical conditions including diabetes. Strenuous overtraining has ensued adverse effects, including an upsurge of proinflammatory cytokines, and hyperglycemia. We implemented an one-month long innovative method with 20 diabetic and prediabetic patients. Results demonstrated a statistically significant reduction of both fasting and PP blood glucose. Fasting and PP insulin reached optimal levels. There was a substantial decline in dyslipidemia, reflecting a reverse relationship of elevated HDL versus triglycerides descending towards the normal range. The notable visceral fat reduction was validated by sonography reports that indicated no evidence of fatty liver in seven patients previously diagnosed with hepatic steatosis. These findings have important implications in improving the health status of obese diabetic and prediabetic individuals, by helping them jumpstart an active lifestyle, or by serving as an exercise alternative to reduce lipids, blood glucose levels and insulin resistance.

Keywords:

Inflammation, Oxidative Stress, Visceral Adiposity, Lipoproteins, Triglycerides, Blood Glucose, Insulin, Hepatic Steatosis, Dyslipidemia, Analgesia, Diabetes, Prediabetes, Weight Loss, Exercise

- Abstract
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after the 12 treatments.

The procedure was in accordance with the ethical standards and principles for medical research involving human subjects.

3. Results

Statistical analysis was based on a repeated measures design where subjects' results after the twelve treatments were compared to their baseline. Table 1 displays the subjects' medical status and their before and after results on overall fat, visceral adipose tissue and skeletal muscle mass (SMM). The SMM data was limited because it was only provided by the clinic that supplied the 5 subjects. The average overall fat loss was 16.99%. The average overall visceral fat loss was 21%. Visceral fat decrease appeared to decline with age as shown in Figure 1. Overall fat reduction also appeared to decline with age, but results were not linear with that variable. Table 2 depicts the subjects' BMI and the weight loss in kilograms (kg), pre and post the twelve treatments.

Results were analysed with the t test for dependent means (Table 6). Results for overall fat loss were statistically significant at p < 0.00001; with a mean of -7.25, a square deviation of 245.69, a T value of t = -9.01646. Results for visceral fat reduction were also highly statistically significant at p < 0.00001; with a mean of -4.88, a square deviation of 94.11, a T value of t = -9.805937. The results of skeletal muscle mass (SMM) increase were statistically significant at p < 0.001; with a mean of +5.18, a square deviation of 7.63, a T value of t = +8.387633 and a p value of p < 0.00055. The data on SMM included only five subjects, therefore these results should be interpreted with caution.

Table 3 displays the subjects' fasting and postglialndial (PP) blood glucose, and fasting and PP insulin levels. The decrease of both fasting and PP blood glucose

Table 1. Pre and post treatment results on overall fat, visceral fat, and skeletal muscle mass (SMM).

Table 2 The visceral fat decrease appeared to be quite significant when compared to the overall body fat percentage decrease, possibly suggesting that there was a true visceral adiposity reduction that was consistently attained by all subjects.

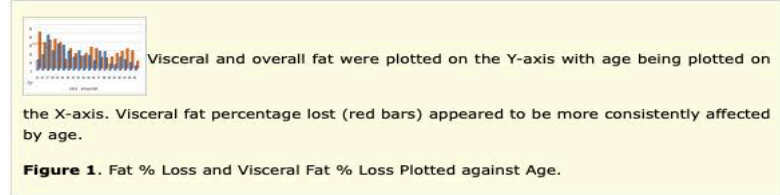


Table 2. Pre and Post BMI and Weight in Kg.

Table 2 There was some reduction in BMI perhaps signifying the necessity for more treatments before achieving a greater difference. The aged diabetic subject seemed to demonstrate the least BMI decrease. There was some weight loss in kgs that may have been affected by exchanging overall fat to build skeletal muscle.

Table 3. Pre and Post Treatment Results on Blood Glucose (Fasting and PP), and Insulin (Fasting and PP). (F: Female; M: Male, D: Diabetes; PD/Prediab.: Prediabetic status Bord: Borderline).

London University Tech  
12 Treatments Diabetic  
and Prediabetics

Sonography reports on 7  
diabetic and prediabetic  
patients with fatty liver  
showed

**NO FATTY LIVER**  
after 12 treatments

**There was an overall  
decrease of Visceral  
Adipose tissue by  
21%**

**Table 1.** Pre and post treatment results on overall fat, visceral fat, and skeletal muscle mass (SMM).

SS	Gender	Age	Health Status	Overall Fat Pre	Overall Fat Post	Fat % Lost	Visceral Fat Pre	Visceral Fat Post	Visceral Fat % Lost	SMM Pre	SMM Post	SMM % Increase
1	Female	45 y	Diabetes; Fatty liver Grade-2; on Meds	42.1	32.7	22.32%	25.6	19.7	23%			
2	Male	69 y	Diabetes; Hypothyroidism; On Meds	35.2	32	9.1%	22	20.5	6.8%			
3	Male	46 y	Diabetes; Hypertension; On Meds	39.8	35.2	11.55%	27	23.2	14%			
4	Female	50 y	Diabetes; Hypothyroidism; On Meds	44.8	41.8	6.7%	27.5	22.7	17.45%			
5	Female	49 y	Diabetes; Hypertension; Hyperthyroidism; On Meds	47.2	43.7	7.41%	31	26.9	13.22%			
6	Female	46 y	Diabetes Fatty Liver Grade-1	44.6	36.8	17.48%	35	24.8	29.14%	22.1	26.4	19.45%
7	Female	48 y	Diabetes Fatty Liver Grade-2	42.9	33.5	21.91%	33	29	12.12%	23.8	29.7	24.8%
8	Male	44 y	Diabetes Fatty Liver Grade-1	34.9	24.6	29.51%	29	26	10.34%	34.5	41.3	19.7%
9	Female	43 y	Prediabetes	36.5	25.8	30.68%	21.6	15	30.33%			
10	Female	27 y	Prediabetes	43.2	35.3	18.28%	19.5	13	33.33%			
11	Female	63y	Prediabetes	46	37.4	12.60%	21	16.5	23%			
12	Female	24 y	Prediabetes Hypothyroidism	43.6	35.4	18.80%	20.5	14.3	30.2%			
13	Female	30 y	Prediabetes	34.1	26.3	22.87%	19	12.5	34.21%			
14	Female	45 y	Diabetes; Fatty Liver Grade-1	34	28.7	15.5%	29	24	17.24%	20.7	26.3	27%
15	Female	47 y	Diabetes Fatty Liver Grade-1	36	27.9	22.5%	31	27	12.9%	23.5	26.8	14%
16	Male	45 y	Diabetes IHD; On Meds	35	27	22.86%	21	18	14.28%			
17	Male	82 y	Diabetes Hypertension; On Meds	39.5	37.5	5.1%	30	27.5	8.3%			
18	Male	15 y	Prediabetes Fatty Liver Grade-1	36.4	32	12.1%	22	12.6	42.72%			
19	Male	58 y	Prediabetes	37.1	31.3	15.6%	16	12.8	20%			
20	Male	46 y	Prediabetes	41.1	34.1	17%	16.5	13.6	17.6%			
MEAN OVERALL FAT DECREASE %						16.99%	MEAN VISCERAL FAT DECREASE %		21%	MEAN SMM % INCREASE		20.99%

	MEAN	SQUARE DEVIATION	T-VALUE	P-VALUE	Significance level
Overall Fat Loss	-7.25	245.69	T = -9.01646	P < 0.00001	P < 0.00001
Visceral Fat Loss	-4.88	94.11	T = -9.805937	P < 0.00001	P < 0.00001
SMM increase	5.18	7.63	T = 8.387633	P < 0.00055	P < 0.001
BMI decrease	-2.59	31.58	T = -8.98461	P < 0.00001	P < 0.00001
Fasting Blood Glucose	-61.88	7675.12	T = -8.115002	P < 0.00001	P < 0.00001
Blood Glucose PP	-63.07	7353.39	T = -8.459736	P < 0.00001	P < 0.00001
Insulin Fasting	-30.71	5961.47	T = -2.976561	P < 0.01031	P < 0.01
Insulin PP	-129.43	18065.62	T = -7.20586	P < 0.00009	P < 0.0001
Upper Abdomen reduction in cm	-9.65	244.55	T = -12.029159	P < 0.00001	P < 0.00001
Umbilicus reduction in cm	-10.32	344.14	T = -10.849653	P < 0.00001	P < 0.00001
Lower Abdomen reduction in cm	-11.5	553	T = -9.532945	P < 0.00001	P < 0.00001
Weight loss in kgs	-6.58	224.56	T = -8.551201	P < 0.00001	P < 0.00001
Triglycerides decrease	-52.72	30161.79	T = -5.917505	P < 0.00001	P < 0.00001
HDL increase	7.06	203.91	T = 9.644717	P < 0.00001	P < 0.00001

with a standard deviation of 76.197, an F value of  $F = 88.81568$  and a p-value of  $p < 0.00001$ .

All variables were analyzed with t-tests for dependent means. The significance table of the variables are given in Table 6.

Figure 2 displays the before and after photos of three of the subjects who gave consent for the pictures to be released. All subjects reported a subjective experience

Table 6. T-test statistical significance.

	MEAN	SQUARE DEVIATION	T-VALUE	P-VALUE	Significance level
Overall Fat Loss	-7.25	245.69	$T = -9.01646$	$P < 0.00001$	$P < 0.00001$
Visceral Fat Loss	-4.88	94.11	$T = -9.80937$	$P < 0.00001$	$P < 0.00001$
SMM increase	5.18	7.63	$T = 8.36703$	$P < 0.00001$	$P < 0.001$
BMI decrease	-2.39	31.38	$T = -8.98461$	$P < 0.00001$	$P < 0.00001$
Fasting Blood Glucose	-61.88	7675.12	$T = -8.13382$	$P < 0.00001$	$P < 0.00001$
Blood Glucose PP	-43.07	7353.39	$T = -8.459736$	$P < 0.00001$	$P < 0.00001$
Insulin Fasting	-36.71	5961.47	$T = -2.876361$	$P < 0.01051$	$P < 0.01$
Insulin PP	-129.43	18085.62	$T = -7.20086$	$P < 0.00001$	$P < 0.00001$
Upper Abdomen reduction in cm	-8.65	244.55	$T = -12.02919$	$P < 0.00001$	$P < 0.00001$
Umbilicus reduction in cm	-10.32	244.14	$T = -10.848653$	$P < 0.00001$	$P < 0.00001$
Lower Abdomen reduction in cm	-11.5	353	$T = -8.532845$	$P < 0.00001$	$P < 0.00001$
Weight loss in kg	-6.58	224.56	$T = -8.551261$	$P < 0.00001$	$P < 0.00001$
Triglycerides decrease	-52.72	30161.79	$T = -5.817305$	$P < 0.00001$	$P < 0.00001$
HDL increase	7.66	203.91	$T = 9.644717$	$P < 0.00001$	$P < 0.00001$



Figure 2. Before (left) and after (right) of three subjects who consented to release their photos.





London University Tech: Clinical Study Hong Kong. Three Treatments



London University Tech: 8 Treatments, Clinical Study, Iraq



**LONDON UNIVERSITY TECH. CLINICAL STUDY HONG KONG. ONE TREATMENT**

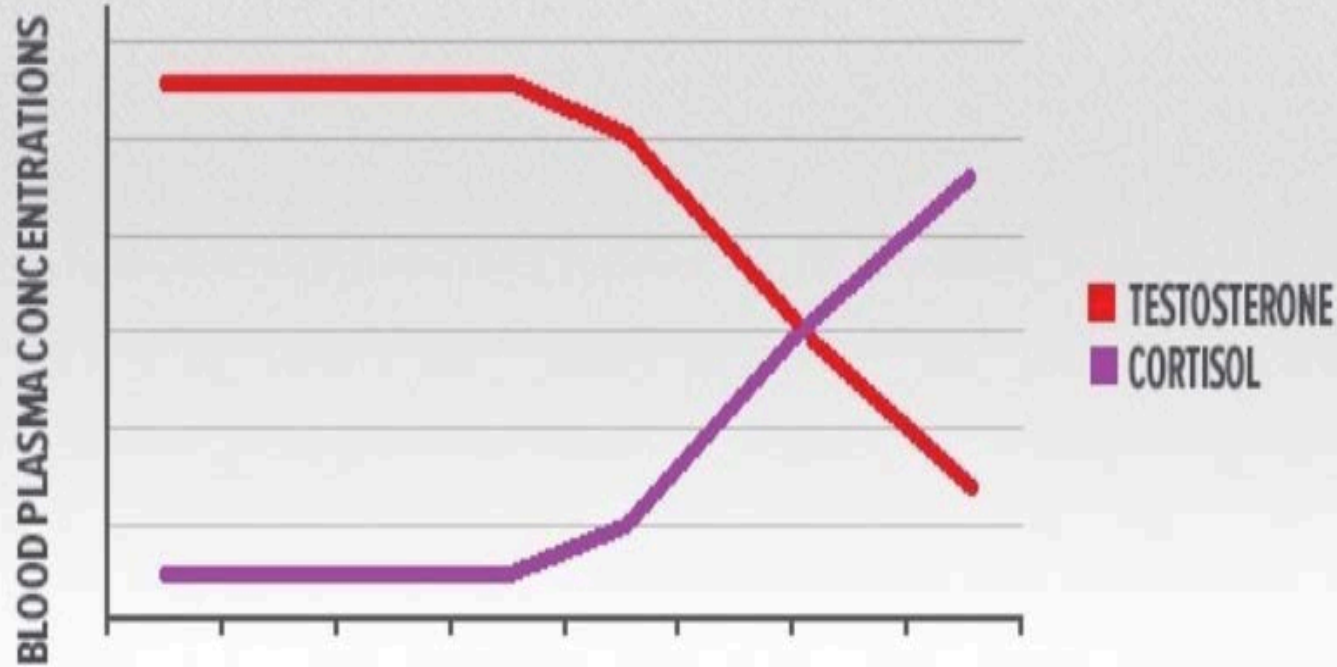


# Can we get the same results with Exercise?

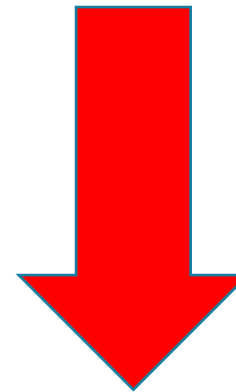
VERY STRENUOUS EXERCISE IS NECESSARY TO GET RID OF VISCERAL FAT

Overtraining can cause **greater hormone imbalance**

### Testosterone & Cortisol - their inverse balance



**TESTOSTERONE**



HOW TO  
KNOW IF  
YOU HAVE  
LOW  
TESTOSTERONE

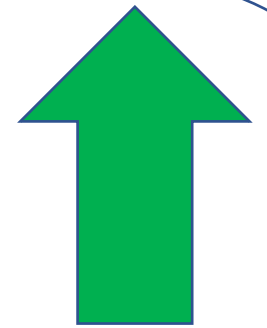
**Mean Average Testosterone  
% Increase**

**62.18  
%**

**Mean Average  
Cortisol % Decrease**

**7.33  
%**

GENDER	TESTOSTERONE PRE	TESTOSTERONE POST	Normal Range (nmol/L)	% Increase	CORTISOL PRE	CORTISOL POST	Normal Range (nmol/L)	% decrease
MALE	10.92	14.6	8.64-29	33.6%	198	181	80-477.3	8.5%
MALE	12.16	15.43	8.64-29	26.9%	177	163	80-477.3	7.9%
FEMALE	0.3	0.71	0.29-1.6	136.6%	135	128	80-477.3	5.2%
FEMALE	0.4	0.9	0.29-1.6	125%	168	153	80-477.3	8.9%
MALE	15.38	21.6	8.64-29	40.4%	229	198	80-477.3	13.5%
MALE	13.41	19.92	8.64-29	48.5%	160	149	80-477.3	6.8%
FEMALE	0.64	0.92	0.29-1.6	43.7%	116	109	80-477.3	6.4%
FEMALE	0.4	0.71	0.29-1.6	77.5%	87	82	80-477.3	5.7%
MALE	11.3	14.4	8.64-29	27.4%	221	214	80-477.3	3.1%
FEMALE	0.43	0.72	0.29-1.6	67.4%	197	189	80-477.3	4.0%



**TESTOSTERONE**



**CORTISOL**



**Reduced  
Stress / hunger**

# WHY DO MY RESULTS **REBOUND** AFTER LASERS OR RF SLIMMING???

LEPTIN /  
GHRELIN  
IMBALANCE

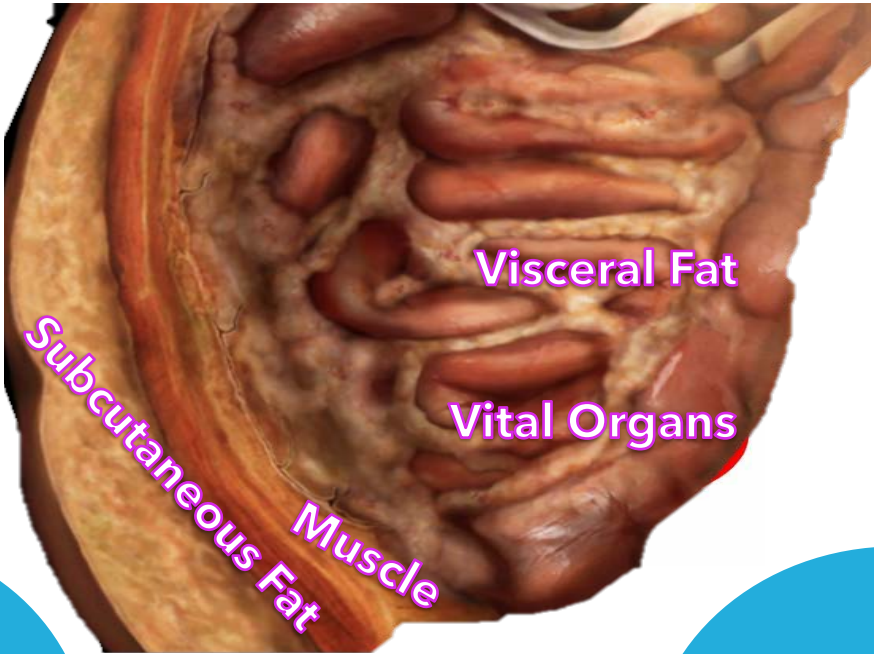
INCREASES HUNGER

HUNGER

CONSUME  
FOOD

WEIGHT  
GAIN

TOXICITY INCREASES HUNGER



TOXICITY

WEIGHT  
GAIN

LEPTIN THE ANOREXIC HORMONE



GHRELIN: THE HUNGER HORMONE



## LONDON UNIV. TECH

Three recent published studies (2020) documented increases in Leptin, decreases in Ghrelin, and a decrease in cravings for fatty foods and sweets, yet normal appetite after 12 sessions

Sofra 2020. DOI: [10.4236/health.2020.128078](https://doi.org/10.4236/health.2020.128078)

Sofra 2020 DOI: [10.4236/health.2020.128076](https://doi.org/10.4236/health.2020.128076)

Sofra 2020

<https://doi.org/10.12968/joan.2020.9.5.202>

**SUPPRESSED HUNGER**

## LASERS AND RF

1. Studies combining Lasers and Exercise have noted a **DECREASE** in the anorexic Hormone Leptin (Duarte et al (2018)

doi: [10.1007/s10103-018-2465-1](https://doi.org/10.1007/s10103-018-2465-1)

**INCREASED HUNGER**

2. Prolonged exercise decreases leptin concentrations by 32% (Landt et al, 1997).

[https://doi.org/10.1016/S0026-0495\(97\)90200-6](https://doi.org/10.1016/S0026-0495(97)90200-6)

**INCREASED HUNGER**



## The Importance of Systemic Balance in Safeguarding Health: A Randomized Double-Blind Clinical Trial on VLDL, Triglycerides, Free T3, Leptin, Ghrelin, Cortisol and Visceral Adipose Tissue

Xanya Sofra<sup>1,2</sup> <sup>1</sup>New School for Social Research, New York City, NY, USA.<sup>2</sup>City University of London, London, UK.

DOI: 10.4236/health.2020.128078 PDF HTML XML 20 Downloads 56 Views

**Abstract**

The purpose of this clinical trial was to delineate some of the negative consequences of high BMI on health and explore the possibility of a solution. We analysed the blood test results of nine overweight adults with sedentary lifestyles, and an average BMI of 32.23. Results revealed a statistically significant reduction of visceral adipose tissue, very-low density lipoprotein (VLDL), and triglycerides. Testosterone, leptin, IGF-1 and Free T3 increased within the normal range, juxtaposed by cortisol and ghrelin that declined, but without dipping into abnormality. These findings have important implications during the COVID-19 pandemic, where optimal immunity is deemed necessary in limiting susceptibility to the virus. Recent research indicates that weight gain often escalates vulnerability to respiratory track disturbances, cardiovascular disease (CVD) and diabetes. Consequently, pre-existing conditions increase COVID-19 mortality rates. CVD and diabetes emerge out of hormonal imbalances that involve Free T3, leptin, ghrelin, testosterone, and cortisol. Physical training is decidedly the most acclaimed solution, yet, the least implemented one, due to procrastination, or demoralization after investing constant exhaustive effort with no immediately visible physical change. COVID-19 confinement exacerbates the tendency for inactivity, and promotes stress-eating behaviours. Moreover, strenuous exercise, necessary for visceral fat reduction, results in a negative cortisol/testosterone relationship that provokes caloric consumption and inflammation. Offering an alternative to exercise that effectively improves health, boosts metabolism, and controls appetite, may serve as a proactive, and preventive method that can safeguard health.

**Keywords**

VLDL, Triglycerides, Free T3, Leptin, Ghrelin, Cortisol and Visceral Adipose Tissue, COVID-19 Susceptibility

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• **Open Special Issues**• **Published Special Issues**• **Special Issues Guideline**[Health Subscription](#)[E-Mail Alert](#)**Table 6.** Blood Plasma Results on Leptin and Ghrelin for each subject.

Gender	Age	Ethnicity	Leptin pre ng/mL	Leptin post ng/mL	Normal range ng/mL	% increase ng/mL	Ghrelin pre pg/mL	Ghrelin post pg/mL	Normal range pg/mL	% decrease pg/mL
Male	36	Asian	3.69	3.98	1.2 - 9.5	7.86%	687	602	520 - 700	12.37%
Male	39	Caucasian	4.43	4.98	1.2 - 9.5	9.78%	695	634	520 - 700	8.77%
Male	43	Caucasian	5.62	6.22	1.2 - 9.5	10.68%	598	552	520 - 700	7.69%
Male	35	Asian	6.15	6.83	1.2 - 9.5	11.05%	629	587	520 - 700	6.68%
Female	42	Asian	9.16	9.74	4.1 - 25.0	6.33%	577	542	520 - 700	6.06%
Female	45	Indian	5.23	6.09	4.1 - 25.0	16.44%	659	613	520 - 700	6.99%
Female	49	Caucasian	7.22	8.17	4.1 - 25.0	13.15%	644	617	520 - 700	4.19%
Female	38	Caucasian	12.34	13.22	4.1 - 25.0	7.13%	569	536	520 - 700	5.79%
Female	37	Asian	11.38	13.08	4.1 - 25.0	14.93%	499	461	520 - 700	7.62%
Mean Average Leptin Increase						+10.82%	Mean Average Ghrelin Decrease		-7.35%	

There was an inverse relationship between leptin and ghrelin where leptin significantly increased and ghrelin significantly decreased within the normal range. Mean average percentage leptin increase was +10.82% and ghrelin decrease was -7.35%.

**Table 7.** Analysis of variance statistical significance results on blood plasma and measurement variables.

	SS	df	MS	F-Ratio Value	p-Value	Significance Level
Testosterone Cortisol	BT: 242,251.2736	BT:3	BT: 80,750.4245	F = 136.51681	<0.00001	P < 0.00001
	WT: 25,503.9549	WT:32	WT: 796.9986			
	E: 14,196.1284	E:24	E: 591.5053			
IGF-1/SMM	BT: 251.7344	BT:3	BT: 83.9115	F = 16.33532	<0.00001	P < 0.00001
	WT: 1167.9813	WT:32	WT: 36.4994			
	E: 123.2835	E:24	E: 5.1368			
VLDL /Triglycerides	BT: 28.34943	BT:3	BT: 9.4648	F = 81.45242	<0.00001	P < 0.00001
	WT: 5.2282	WT:32	WT: 0.16434			
	E: 2.7888	E:24	E: 0.1162			
Visceral Fat Free T3	BT: 105,989.285	BT:3	BT: 35,328.4283	F = 704.83951	<0.00001	P < 0.00001
	WT: 2064.6557	WT:32	WT: 64.5205			
	E: 1202.9437	E:24	E: 50.1227			
Leptin Ghrelin	BT: 3,100,114.916	BT:3	BT: 1,036,371.6387	F = 804.2602	<0.00001	P < 0.00001
	WT: 55,563.1985	WT:32	WT: 1736.35			
	E: 30,926.4581	E:24	E: 1288.6024			

Abbreviations: BT: Between Treatments/WT: Within Treatments/E: Error.

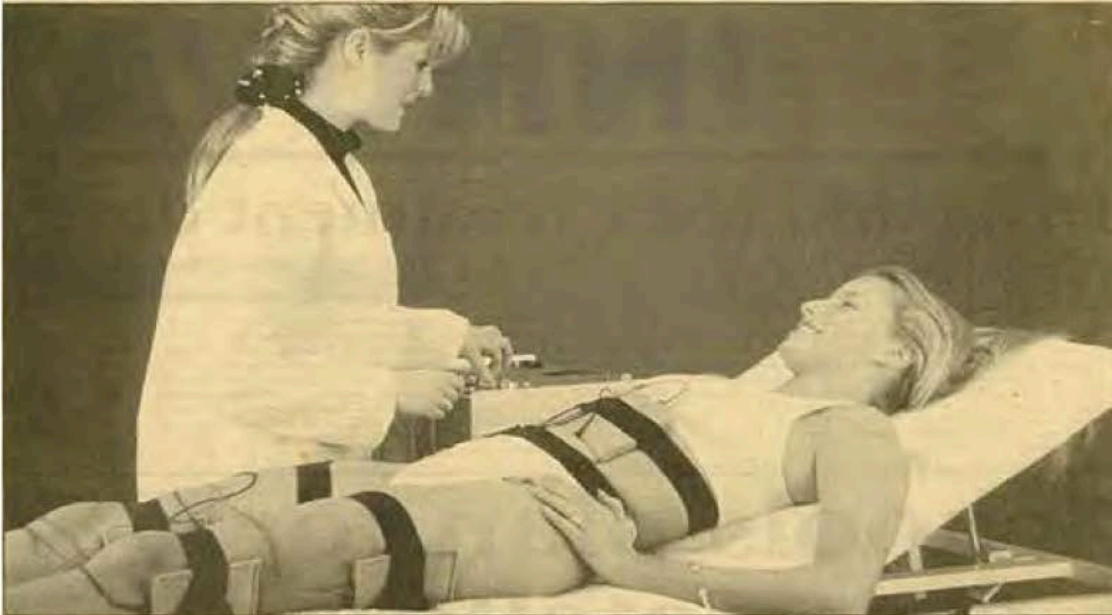
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# THE SUNDAY TIMES

INNOVATION 3-11



Keeping trim without the effort of exercise: the Arasys suits, already used in beauty salons, could be put to work in hospitals to tone the muscles of bedridden patients

## Fighting the flab without sweat

A SCIENTIST has invented a machine he claims will keep people trim without the need for exercise and could help reverse muscle-wasting conditions such as multiple sclerosis, writes Sean Hargrave.

The Arasys exerciser unite (A-RADic SYSTEM), developed at London's South Bank University Technopark, is already being sold to health clubs and beauty salons for those who want to lose weight without putting in the effort.

Now the machine's designer, Gerry Pollock, is searching for hospitals and clinics that could help him test the system on disabled patients who are unable to exercise. He believes Arasys could prevent the muscle wastage common among those confined to bed or a wheelchair.

The machine flexes muscle by passing tiny electric currents through nerve endings at either end of muscle

groups. This makes the tissue contract for two seconds, as if it were being put through a gym workout.

A typical session with the machine lasts 17 minutes. Pollock says this is because people can feel tired if they have a longer stint and do not notice as much benefit as from a shorter session. He claims each treatment is the equivalent of doing 300 sit-ups and that three sessions are all that are needed until weight loss can be measured.

The Arasys system can treat four sets of muscle simultaneously. In cosmetic use these are normally the stomach, bottom, thighs and calves. In medical use, this would change to exercise the parts of the body a patient cannot move.

Pollock, a chemist, claims his technology is superior to machines that make similar claims of effortless

weight-loss because of the electric wave form he designed. He says his electronics expertise, that was used in the development of the first pacemaker, ensures the muscles are exercised at the correct speed for the optimum duration.

This involves controlling electrical impulse to avoid suddenly jerky muscle movements. To achieve this, Arasys generates smooth rather than spiked electrical signals so that the muscle is stretched in a manner more similar to way it behaves during real exercise.

"We only discovered how long and intense the signal should be through trial and error during the system's five-year development," says Pollock. "Just passing any old electrical signal across a muscle simply doesn't work."

Besides helping the disabled, Pollock believes his machine could be used to return strength to the elderly

and those who suffer from multiple sclerosis.

His niece, Angela Sylvester, a qualified nurse, regularly uses Arasys on four ME sufferers who are unable to exercise. She claims they all report they feel stronger.

"One of the ladies used to be a fitness instructor, but because of her condition she cannot work out any more," says Sylvester. "she benefits from being able to stay trim and exercise muscles that would otherwise be hardly used."

Pollock hopes his invention will soon be put to its original healthcare use and is keen to talk with clinics and hospitals that believe they could help him tailor the system for individual conditions.

"I need to talk with experts so that we can decide if the present electrical signal is appropriate or if it needs changing," he says.

## What is this London University invention?

Sunday Times, UK and other journals published several articles about Gerry Pollock's invention of SIMULATED EFFORTLESS EXERCISE in London University that Dr Gerry Pollock completed after 27 years of laboratory, empirical (atheoretical / trial & error) research.

- Dr Gerry Pollock was the co-inventor of the first pacemaker in London University



# Dr Gerry Pollock's London University Research (1990)

## Goldpink's research on Gene Expression

- ❖ Rapid muscular hypertrophy
- ❖ 250% increase in the RNA content of the muscles
- ❖ Repression of the fast-type genes and activation of the SKELETAL slow-type genes.

### Stretch and force generation induce rapid hypertrophy and myosin isoform gene switching in adult skeletal muscle

Geoffrey Goldspink, Andrew Scutt, Jane Martindale, Thomas Jaenicke, Lucien Turay and Gerald-F. Gerlach  
Unit of Molecular and Cellular Biology, The Royal Veterinary College, London University, Royal College Street,  
London NW1 0TU, U.K.

#### Summary

Using electrical stimulation to control force generation and limb immobilization to alter the degree of stretch, we have studied the role of mechanical activity in inducing hypertrophy and in determining fast and slow muscle fibre phenotype. Changes in gene expression were detected by analysing the RNA in hybridization studies employing cDNA probes specific for fast and slow myosin heavy chains and other genes. As a result of overload in the stretched position, the fast contracting tibialis anterior muscle in an adult rabbit is induced to synthesize much new protein and to grow by as much as 30% within a period as short as 4 days. This very rapid hypertrophy was found to be associated with an increase of up to 250% in the RNA content of the muscles and an abrupt change in the species of RNA produced. Both stretch alone and electrical stimulation alone caused repression of the fast-type genes and activation of the slow-type genes. It appears that the fast-type IIB genes are the default genes, but that the skeletal slow genes are expressed as a response to overload and stretch. These findings have implications as far as athletic training and rehabilitation are concerned.

#### Introduction

Muscle is a tissue in which gene expression is regulated to a large extent by mechanical signals. Mammalian muscle consists of populations of slow-contracting, oxidative fibres and fast-contracting fibres which are characterized by different protein isoforms. Therefore, post-natal growth and the differentiation into the fast type or the slow type of fibres must presumably involve the regulation of expression of different subsets of genes. Here we have focused on the expression of myosin heavy chain genes and their response to mechanical stimuli.

The intrinsic velocity of contraction ( $V_{max}$ ) of muscle fibres is related to the specific activity of their myosin ATPase [1]. Myosin is a double molecule that consists of two heavy chains each of about 220 kDa. The actin-attachment site and the ATPase site are located in the S1 region (head of the myosin

molecule) of each heavy chain. Associated with the S1 fragment are smaller polypeptides called light chains which are believed to modulate the cross-bridge ATPase activity [2]. Subtypes of fast muscle fibre have been identified histochemically and these may exist because of different combinations of myosin heavy and light chains and different mitochondrial content. Slow fibres differ in several ways from fast fibres in that they have many more mitochondria, different cytoplasmic isoenzymes, as well as different isoforms of myofibrillar proteins. The isoforms of myosin have been shown to be the product of a multigene family and their expression is tightly regulated in a stage-specific and tissue-specific manner [3, 4]. Phenotypic expression of muscle genes is known to be influenced by thyroid hormone [5, 6] and altered patterns of innervation [7]. However, the influence of physical activity at the gene level was unclear. We have, therefore, studied changes in transcriptional levels of the fast and slow myosin heavy chain genes in response to stretch and force generation.

#### Methods

##### Stimulation and acute-stretch procedures

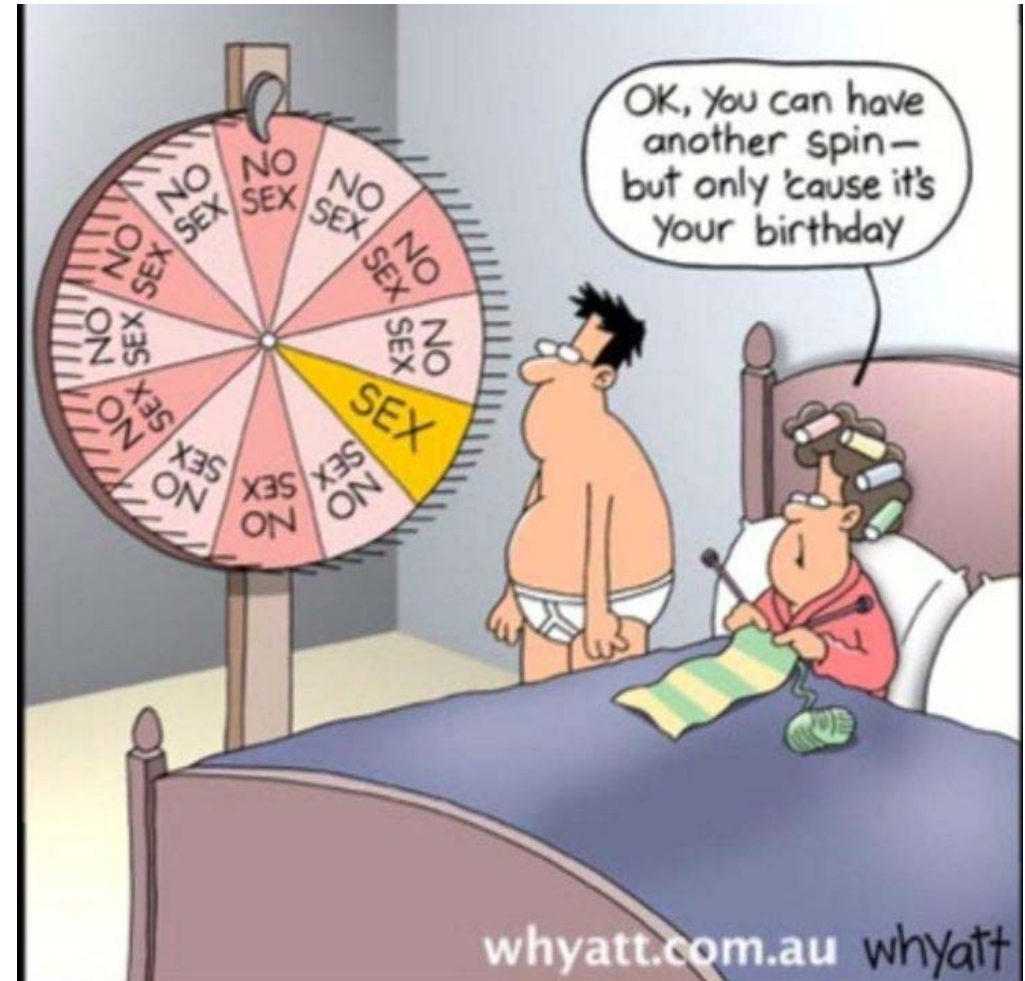
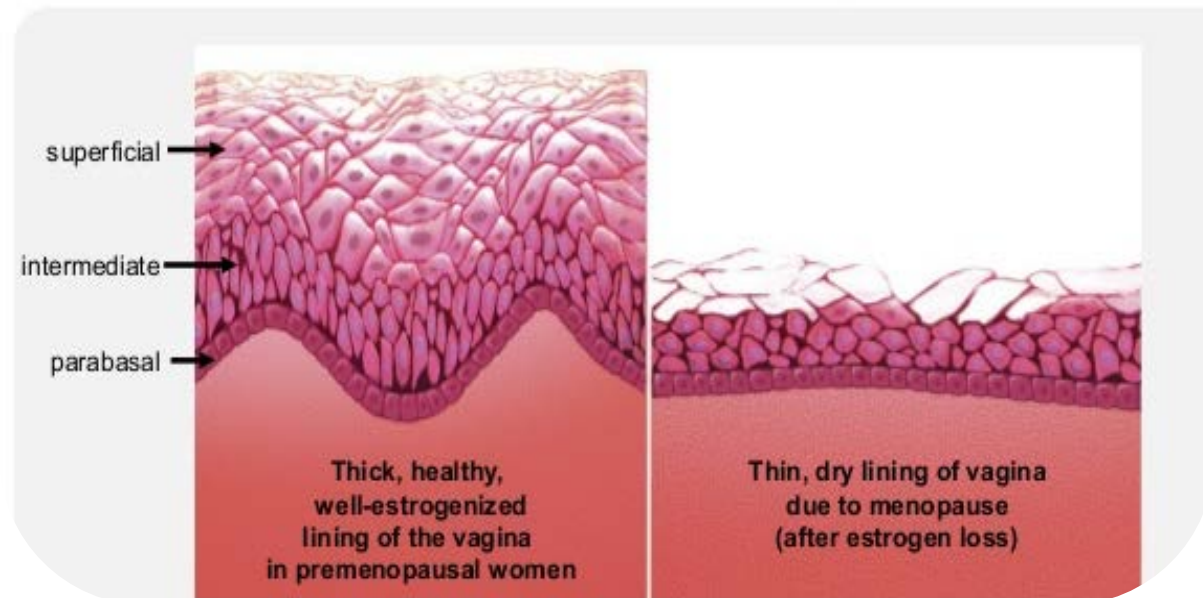
Tibialis anterior (TA) muscles in adult Netherland dwarf rabbits were stimulated using Teflon-coated stainless-steel electrode wires implanted into the popliteal fossa [8] under valium/Hypnorm anaesthesia. The electrode wires were externalized at the back of the neck and attached to a miniature stimulation circuit which was held in position by a small saddle fashioned out of an elastic bandage. Several circuit designs were used which generated biphasic pulses at frequencies ranging from 2 Hz continuous to 120 Hz intermittent. A 30 Hz intermittent circuit was designed to give the same number of pulses/min as a 2 Hz continuous, and a 120 Hz and 60 Hz intermittent circuit gave the same number of pulses/min as a 10 Hz continuous circuit. In this way, the hypothesis that it is the number of pulses delivered which determines muscle fibre phenotype could be tested. The pulse length was 0.1 ms and the pulse amplitude was adjustable from 1 to 3 V and each miniature stimulator was fitted with an on/off switch. Muscle

# Oestrogen decline In women: The need for Vaginal Rejuvenation

**Bleeding and burning sensations during intercourse**

Low self confidence leading to interpersonal conflict or neglect

## Vaginal Atrophy Pathophysiology: Cellular Changes





# *In the pursuit of Happiness*

Women attempt to resolve the psychodynamic rollercoaster of aging by merely altering their vaginal physique.

Laser and RF vaginal rejuvenation procedures claim female satisfaction based on short self report questionnaires without a deeper understanding of female dynamics

1. Alinson et al (2016) did not use a valid standardized test to assess sexual satisfaction. Results: 23 out of 25 subjects reported sexual satisfaction after RF procedure. **But only 9 out of 25 subjects reported increased satisfaction regarding their orgasms, while 16 out of 25 subjects reported no change.** <https://doi.org/10.1002/lsm.22537>

2. Laser Vaginal Rej studies using the FSFI state that 92.9% of their subjects reported increased satisfaction after laser treatments. **That's statistically insignificant p = 0.18**

<https://doi.org/10.1089/jwh.2012.4123>

<https://doi.org/10.3109/13697137.2014.975197>

<https://doi.org/10.1007/s00266-015-0502-z>

<https://doi.org/10.3109/2000656X.2014.944187>

## Other problems with Laser / RF vaginal Rejuvenation

1. None of the laser or RF vaginal rejuvenation research assesses overall quality of life or considers the complexity of the endocrinological communication system that consists of over 200 known hormones.
2. Female sexuality is a multidimensional system of hormonal and other protein communications interacting with emotions and cognition at different degrees often causing imbalance.
3. According to the FDA (2018) " the full extent of the risks (of laser /RF and plastic surgery vaginal rejuvenation procedures) is unknown... reports indicate that procedures such can cause serious harm..."

### Conclusion:

**None of the lasers/ RF studies reviewed present conclusive evidence that lasers or radiofrequency vaginal rejuvenation procedures are the solutions to women's complex sexual decline with age**



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Health > Vol.12 No.6, June 2020

### Dynamics of Female Sexuality; Hidden Emotional Issues

Xanya Sofra

IELLIOS Research Centre, Suffolk, UK.

DOI: 10.4236/health.2020.126051 PDF HTML XML 70 Downloads 171 Views

#### Abstract

Sexual satisfaction following Laser or RF vaginal rejuvenation is usually assessed by straightforward self-report questionnaires that may not offer a deeper insight into female dynamics. Our randomized double-blind longitudinal clinical trial on 14 menopausal women with high FSFI satisfaction scores following laser or RF vaginal interventions, demonstrated a high positive correlation between the subjects' FSFI scores and the Hy (hysteria), D (Depression) and L (Lie) validity scales of the MMPI-2. Such high positive correlation between the FSFI and the L-scale negates the reported increase in female sexual satisfaction following laser or RF vaginal rejuvenations. The high positive correlations of the FSFI with the Hy and D scales indicate that despite reports of increased sexual satisfaction, the vaginal procedures did not improve psychological wellbeing or quality of life. Results on the Differential Emotions Scale (DES) reveal that 98% of the subjects were organized around the emotions of shame, sadness and joy. Such results indicated a multilayered emotional organization that possibly reflects joy on the outside and shame and sadness on the inside. Results of Laser or RF vaginal rejuvenation procedures should be evaluated by a battery of tests that take into account females' often prominent tendency to focus on satisfying their partners rather than themselves. Going down the path that starts with a dismissal of self-fulfillment to focus on their partners' satisfaction, may bring several women to the endpoint of disingenuous interpersonal relationships tainted by repressed disillusionment.

#### Keywords

Aging, Female Sexuality, Vaginal Rejuvenation, FSFI, MMPI, DES, Lie Validity Scale, Lasers, RF

#### Share and Cite:



Sofra, X. (2020) Dynamics of Female Sexuality; Hidden Emotional Issues. *Health*, 12, 694-708. doi: 10.4236/health.2020.126051.

#### 1. Introduction

Two recent studies challenge the methods and tests used to assess female sexual satisfaction after laser /RF vaginal rejuvenation interventions

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## Empowering the woman: a comprehensive model of sexual anti-ageing

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### Abstract

Female ageing is associated with sexual decline and well-documented symptoms of decreased metabolism, increased visceral fat deposits, decreased mobility, increased incidence of body aches and impaired self-confidence, which can lead to depression, marital dissatisfaction, conflicts or apathy. Sexual decline becomes more prominent with diabetic females suffering from neuropathy that is usually a challenge, since traditional methods usually offer temporary pain relief. Hormone replacement interventions treat only part of the systemic hormonal imbalance problem, ignoring the fact that disruption in the hormonal network signifies a disruption in the entire microcosmos of cellular communications leading to bio-disorganisation and health deterioration. New vaginal rejuvenation methods aspire to resolve a complex psychophysiological issue by merely improving vaginal laxity and dyspareunia, via invasive or minimally invasive methods that often reduce sexual sensation for women, while increasing male satisfaction during intercourse. Here, we offer a more comprehensive model of female sexuality, and discuss two new research studies performed entirely on female subjects. Both studies are discussed with respect to the multi-faced, psychophysiological, composite of female sexuality, which cannot show meaningful improvement without treating both its physiological and psychological components.

# When it comes to Women... Nothing is as it seems

Randomized double-blind longitudinal clinical trial on 14 menopausal women with high FSFI (Female Sexual Function Index) satisfaction scores following laser or RF vaginal interventions

1. High positive correlation between the subjects' FSFI scores and the Hy (hysteria), D (Depression) and L (Lie) validity scales of the MMPI-2.
  2. High positive correlation between the FSFI and the L-scale negate the outward positive façade.
- 
3. Results on the Differential Emotions Scale (DES) reveal that 98% of the subjects were organized around the emotions of shame, sadness and joy. Such results indicated a multi-layered emotional organization that possibly reflects joy on the outside and shame and sadness on the inside.



## **CONCLUSION:**

Females are often in charge in keeping the family together. Therefore, success of interpersonal relationships depends on female satisfaction / improved quality of life.

Female empowerment depends on

1. Understanding
2. Self assertion without the fear of judgement

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## **CAUTION TO VAGINAL REJ DOCTORS:**

In assessing female satisfaction short self report questionnaires like the FSFI may be insufficient in assessing the richness of female dynamics. Therefore, the conclusions drawn on female satisfaction may be in fact, false or invalid



# CURRENT RESEARCH PROJECTS BY CLINICIANS



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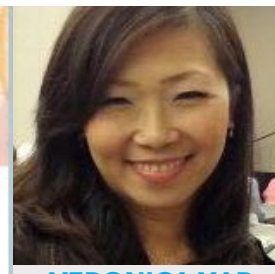
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THANK YOU

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