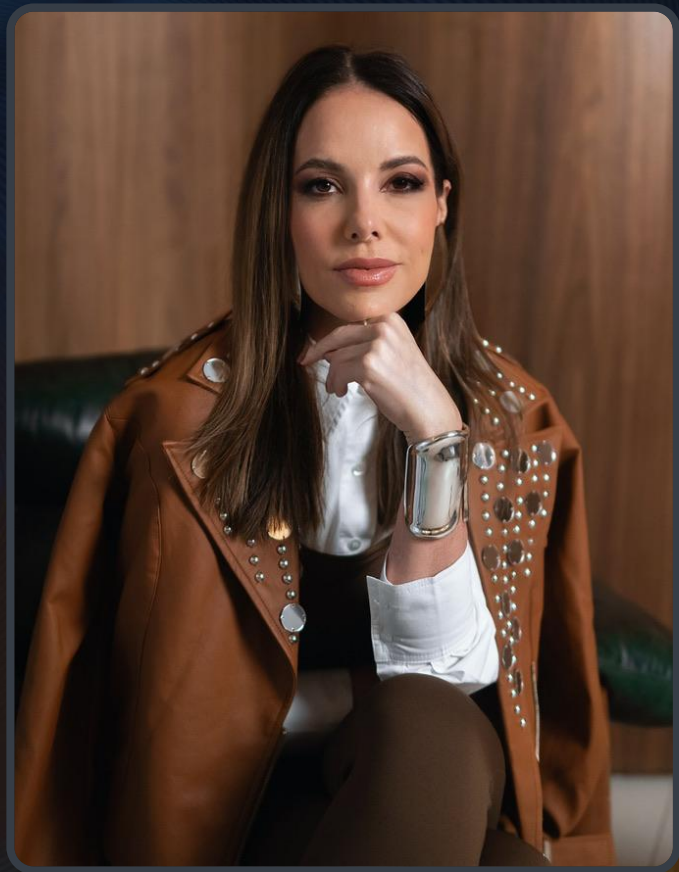


ABORDAGEM FUNCIONAL INTEGRATIVA DO LIPEDEMA

Dra Ju Bicca | Médica Endocrinologista

Brasil / UAE

Vice-Presidente da SBMFI



19

📅 4 de 5

Dr. Bruno César

Emagrecimento e hormônios

20

Dra. Janaina Koenen

Hormônios e Câncer

21

19:00 - 20h - Painel / Mesa Redonda

25, DOMINGO

22

8:00 - 8:40 - Marcus Zanetti

Psicofármacos X Suplementos: teoria e prática

23

Dr. Leonardo Higashi

Testosterona na Saúde da Mulher

24

Dra. Juliana Bicca

A única que pode escolher o tema das galáxias, por ser Avatar Ungida!



lipedema

[Advanced](#) [Create alert](#)

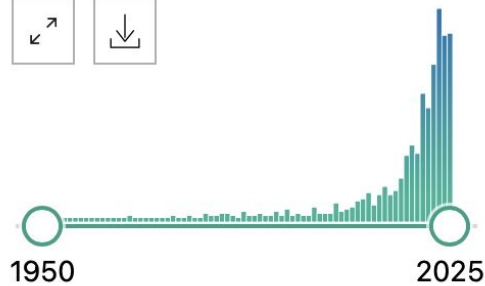
Save

Email

MY CUSTOM FILTERS

653 results

RESULTS BY YEAR



[Dietary sup](#)

1 Bonetti G, Her

Cite Cestari M, Coc

J Prev Med Hy

4248/jpmh202

PMID: 364795

Lipedema mo

genetics and h



lipedema

Advanced Create alert Create

Save

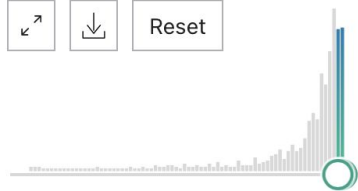
Email

Send to

MY CUSTOM FILTERS

167 results

RESULTS BY YEAR



2024-2025

[S2k guideline lipedema](#)

1 Faerber G, Cornely M, D

Cite Rapprich S, Reich-Schu

J Dtsch Dermatol Ges.

PMID: 39188170

The guideline aims to o

together the different a

manner and thus offer



erectile dysfunction

Advanced Create alert Create RSS

Save

Email

Send to

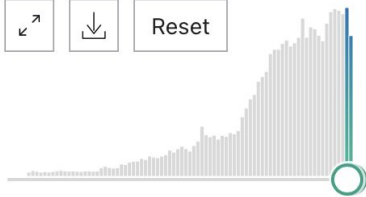
MY CUSTOM FILTERS

1,363 results

RESULTS BY YEAR



Reset



2024-2025



Filters applied: in the last 1



Erectile Dysfunction: Up

1 Capogrosso P, Albersen M, Burr

Cite AF, Satchi M, Serefoglu EC, Sha

Eur Urol. 2025 Oct;88(4):388-3

PMID: 40393866 Review.

BACKGROUND AND OBJECTIVE



obesity

Advanced Create alert Create RSS

Save

Email

Send to

MY CUSTOM FILTERS

33,935 results

RESULTS BY YEAR



Reset



2024-2026



Filters applied: in the last 1



Obesity accelerates card

1 Ruperez C, Madoe F, de Cabo R

Cite Eur Heart J. 2025 Jun 16;46(23

PMID: 40197620 Free PMC

Indeed, clinical and experimental
evidence in the pathogenesis of u



hair loss

Advanced Create alert Create RSS

Save

Email

Send to

MY CUSTOM FILTERS

2,973 results

RESULTS BY YEAR



Reset



2024-2026



Filters applied: in the last 1



Exosomes for Treating Ha

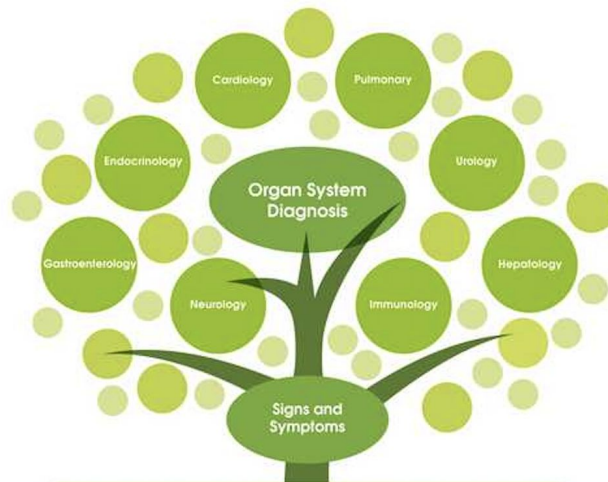
1 Queen D, Avram MR.

Cite Dermatol Surg. 2025 Apr 1;51(4

24.
PMID: 39447204 Review.

BACKGROUND: The regenerative
skin and hair diseases. Preclin





The Fundamental Organizing Systems and Core Clinical Imbalances

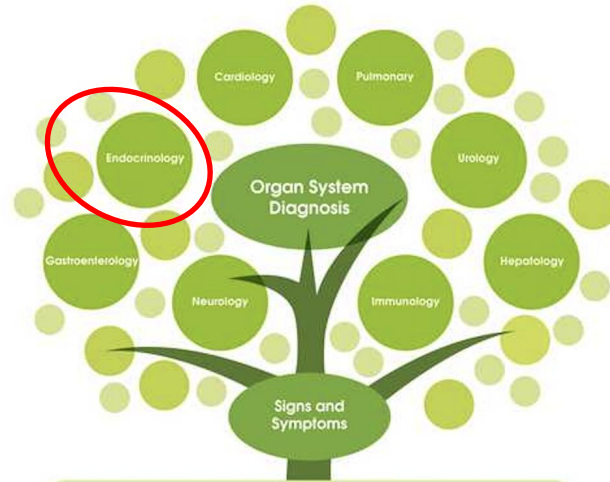
Assimilation Digestion, Absorption, Microbiota/GI, Respiration	Energy Energy regulation, Mitochondrial function, Biotransformation and Elimination	Transport Cardiovascular, Lymphatic systems
Defense and Repair Immune system, inflammatory processes, infection and microbiota	Toxicity, Detoxification Communication Endocrine, Neurotransmitters, Immune messengers, Cognition	Structural Integrity From the subcellular membranes to the musculoskeletal system

Antecedents, Triggers, and Mediators

Mental, Emotional, Spiritual Influences • Genetic Predisposition • Experiences, Attitudes, Beliefs

Sleep & Relaxation Exercise/ Movement Nutrition/ Hydration Stress/ Resilience Relationships/ Networks Trauma Micro-organisms Environmental Pollutants

Personalizing Lifestyle and Environmental Factors



The Fundamental Organizing Systems and Core Clinical Imbalances

Assimilation Digestion, Absorption, Microbiota/GI, Respiration	Energy Energy regulation, Mitochondrial function, Biotransformation and Elimination	Transport Cardiovascular, Lymphatic systems
Defense and Repair Immune system, Inflammatory processes, Infection and microbiota	Toxicity, Detoxification Communication Endocrine, Neurotransmitters, Immune messengers, Cognition	Structural Integrity From the subcellular membranes to the musculoskeletal system

Antecedents, Triggers, and Mediators

Mental, Emotional,
Spiritual Influences



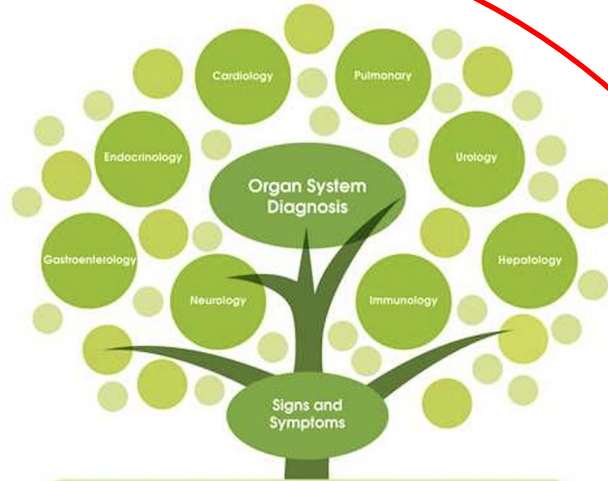
Genetic Predisposition



Experiences,
Attitudes, Beliefs

Sleep & Relaxation	Exercise/ Movement	Nutrition/ Hydration	Stress/ Resilience	Relationships/ Networks	Trauma	Micro- organisms	Environmental Pollutants
-----------------------	-----------------------	-------------------------	-----------------------	----------------------------	--------	---------------------	-----------------------------

Personalizing Lifestyle and Environmental Factors



The Fundamental Organizing Systems and Core Clinical Imbalances

Assimilation Digestion, Absorption, Microbiota/GI, Respiration	Energy Energy regulation, Mitochondrial function, Bioremediation and Elimination	Transport Cardiovascular, Lymphatic systems
Defense and Repair Immune system, Inflammatory processes, Infection and microbiota	Toxicity, Detoxification Communication Endocrine, Neurotransmitters, Immune messengers, Cognition	Structural Integrity From the subcellular membranes to the multicellular system

Antecedents, Triggers, and Mediators

Mental, Emotional,
Spiritual Influences

Genetic Predisposition

Experiences,
Attitudes, Beliefs

Sleep &
Relaxation

Exercise/
Movement

Nutrition/
Hydration

Stress/
Resilience

Relationships/
Networks

Trauma

Micro-
organisms

Environmental
Pollutants

Personalizing Lifestyle and Environmental Factors

FUNCTIONAL MEDICINE MATRIX

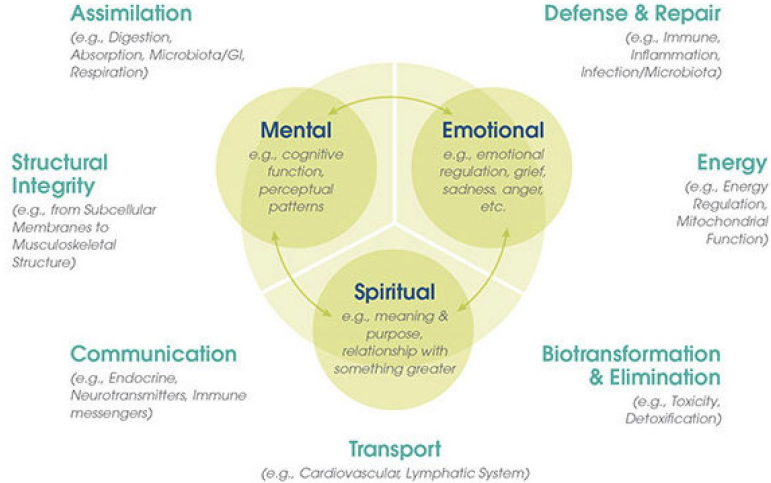
Retelling the Patient's Story

Antecedents
(Predisposing Factors—
Genetic/Environmental)

Triggering Events
(Activators)

Mediators/Perpetuators
(Contributors)

Physiology and Function: Organizing the Patient's Clinical Imbalances



Modifiable Personal Lifestyle Factors

Sleep & Relaxation

Exercise & Movement

Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____

HIERARQUIA DO RACIOCÍNIO CLÍNICO FUNCIONAL INTEGRATIVO

Raciocínio clínico funcional integrativo sistêmico

1. RACIONAL EPIGENÉTICO

História de vida desde o nascimento, infância e adolescência.
Identificação de gatilhos e linha do tempo dos sintomas.
Avaliação de fatores ambientais, familiares, infecciosos e emocionais.

Modelo do "copo transbordando" e "porta fechada do cômodo".

Tratamentos paliativos prévios que mascararam causas.
Reconstrução cronológica dos processos fisiopatológicos.

2. EIXO HPA / REGULAÇÃO NEUROENDÓCRINA E AUTONÔMICA

Estresse crônico, eventos traumáticos e gatilhos emocionais.
Qualidade e arquitetura do sono (ritmo circadiano, sono reparador).

Exercício físico (tipo, frequência, carga e recuperação).

Distúrbios do SNA (simpático/parassimpático).

Uso de estimulantes e hipnóticos.

Ponto de quebra da homeostase neuroendócrina.

3. SISTEMA GASTROINTESTINAL E SAÚDE ORAL

Histórico alimentar e sensibilidades.

Sintomas funcionais e orgânicos.

Saúde oral, microbiota oral e disbiose intestinal.

Aumento de permeabilidade intestinal, SIBO, IMO,
intolerâncias, outras...

Planejamento nutricional individualizado (macro e
micronutrientes).

Eixos intestino-cérebro, intestino-imunidade, intestino-fígado.

4. FOCO NA QUEIXA PRINCIPAL — INTERVENÇÃO DIRIGIDA

Investigação aprofundada do sistema/órgão-alvo.

Integração com os eixos anteriores em reequilíbrio.

Causas primárias, secundárias e perpetuantes.





Estratégias individualizadas e sequenciais.

Monitoramento e ajustes dinâmicos.



Prevalência e fatores de risco para lipedema no Brasil

Lipedema prevalence and risk factors in Brazil

Alexandre Campos Moraes Amato¹ , Fernando Campos Moraes Amato¹ , Juliana Lelis Spirandeli Amato¹ ,
Daniel Augusto Benitti² 

Resumo

Contexto: O lipedema é caracterizado por deposição anormal de gordura em glúteos e pernas bilateralmente, que pode ser acompanhada por edema, dor e sensibilidade ao toque. Ainda é frequentemente confundido com condições mais frequentes, como obesidade e linfedema. A prevalência estimada na Europa varia entre 0,06% e 39%. **Objetivos:** Avaliar a prevalência do lipedema na população brasileira e identificar fatores de saúde relacionados a essa doença. **Métodos:** Foi aplicado um questionário de rastreamento on-line, previamente validado em amostra representativa da população geral. O questionário de rastreamento foi distribuído e aplicado em voluntárias anônimas representativas da população geral brasileira por *software* dedicado a análises populacionais. **Resultados:** Um total de 253 mulheres respondeu ao questionário, e $12,3 \pm 4\%$ (intervalo de confiança de 95%) apresentaram sintomatologia compatível com alta probabilidade de diagnóstico de lipedema. Ansiedade, depressão, hipertensão e anemia foram correlacionadas com a alta probabilidade diagnóstica da doença. **Conclusões:** A prevalência estimada do lipedema na população de mulheres brasileiras é de 12,3%.

Palavras-chave: prevalência; questionários; lipedema; obesidade; linfedema.





VC SABIA QUE UMA MULHER DEMORA CERCA DE 42H E
PRECISA PASSAR EM PELO MENOS 4 MÉDICOS PARA
RECEBER UM DIAGNÓSTICO ?



Review

Lipedema and the Potential Role of Estrogen in Excessive Adipose Tissue Accumulation

Kaleigh Katzer, Jessica L. Hill , Kara B. McIver and Michelle T. Foster * 

- **# DISTRIBUIÇÃO ALTERADA** DO RECEPTOR DE ESTROGÊNIO DOS ADIPÓCITOS (RAZÃO ERA/ER β)
- **# AUMENTO DA LIBERAÇÃO** DE ENZIMAS ESTEROIDOGÊNICAS PRODUZIDAS POR ADIPÓCITOS LEVANDO A AUMENTO DA LIBERAÇÃO DE ESTROGÊNIO DE FORMA PARÁCRINA. ESSAS ALTERAÇÕES PODERIAM RESULTAR EM AUMENTO DA ATIVAÇÃO DO RECEPTOR γ ATIVADO POR PROLIFERADORES DE PEROXISSOMA (PPAR γ), ENTRADA DE ÁCIDOS GRAXOS LIVRES NOS ADIPÓCITOS, AUMENTO DA CAPTAÇÃO DE GLICOSE, DIMINUINDO A LIPÓLISE, MITOCONDRIOGÊNESE E FUNÇÃO MITOCONDRIAL



Article

Observational Study on a Large Italian Population with Lipedema: Biochemical and Hormonal Profile, Anatomical and Clinical Evaluation, Self-Reported History

Laura Patton ^{1,†}, Lorenzo Ricolfi ^{1,†}, Micaela Bortolon ², Guido Gabriele ³, Pierluigi Zolesio ⁴, Erika Cione ^{5,6} and Roberto Cannataro ^{5,6,7,*}

Table 6. Hormonal profile in patients of childbearing age.

VARIABLE	ALL	STAGE 1	STAGE 2	STAGE 3	<i>p</i> STAGES	WITHOUT UP	WITH UL	<i>p</i> UL
LH (μU/mL)	8.14 ± 8.14 (137)	7.40 ± 3.77 (58)	10.3 ± 11.9 (50)	7.26 ± 5.86 (29)	NS	8.44 ± 8.65 (72)	8.38 ± 7.6 (65)	NS
FSH (vμU /mL)	11.34 ± 14.5 (140)	9.02 ± 6.80 (61)	14.18 ± 21.6 (49)	11.4 ± 10.9 (30)	NS	10.4 ± 13.7 (73)	12.3 ± 15.5 (63)	NS
Progesterone ng/mL	0.512 ± 0.506 (131)	0.575 ± 0.548 (55)	0.493 ± 0.535 (48)	0.422 ± 0.340 (28)	NS	0.570 ± 0.580 (69)	0.450 ± 0.405 (62)	NS
Estradiol (pg/mL)	66.8 ± 60.2 (131)	60.6 ± 43.7 (57)	72.9 ± 69.0 (48)	60.1 ± 74.1 (26)	NS	69.4 ± 71.0 (72)	63.6 ± 44.2 (59)	NS
Androstenedione (ng/dL)	152 ± 96.5 (105)	171 ± 103 (43)	139 ± 103 (41)	138 ± 62.1 (21)	NS	172 ± 102 (55)	129 ± 86.0 (50)	0.022
DHEA	6.32 ± 5.80 (72)	5.96 ± 4.77 (31)	7.02 ± 7.57 (27)	5.78 ± 3.91 (14)	NS	7.04 ± 6.66 (45)	5.12 ± 3.80 (27)	NS
DHEA-S (μg/mL)	1.75 ± 0.925 (126)	1.79 ± 0.94 (56)	1.68 ± 0.86 (44)	1.77 ± 1.01 (26)	NS	1.82 ± 0.977 (68)	1.66 ± 0.861 (58)	NS
17-OH-progesterone (ng/dL)	74.5 ± 37.9 (104)	84.7 ± 37.9 (48)	61.3 ± 36.3 (37) *	74.4 ± 34.4 (19)	0.017	81.1 ± 40.0 (60)	65.5 ± 33.1 (44)	0.038
Total testosterone (ng/mL)	0.29 ± 0.163 (134)	0.304 ± 0.181 (59)	0.273 ± 0.141 (49)	0.290 ± 0.163 (26)	NS	0.284 ± 0.146 (70)	0.297 ± 0.181 (74)	NS
FAI	1.85 ± 1.35 (97)	1.68 ± 1.25 (44)	1.73 ± 1.93 (39)	2.69 ± 179 (14) S#	0.040	1.66 ± 1.086 (59)	2.14 ± 1.65 (38)	0.042
SHBG (mmol/L)	76.5 ± 38.0 (106)	77.7 ± 31.3 (46)	76.2 ± 39.8 (43)	73.8 ± 50.8 (17)	NS	76.1 ± 32.6 (65)	77.1 ± 45.8 (41)	NS

Reproductive Landmarks and Lipedema: Lessons to be Learned about Women Hormones throughout Life

Juliana Bicca

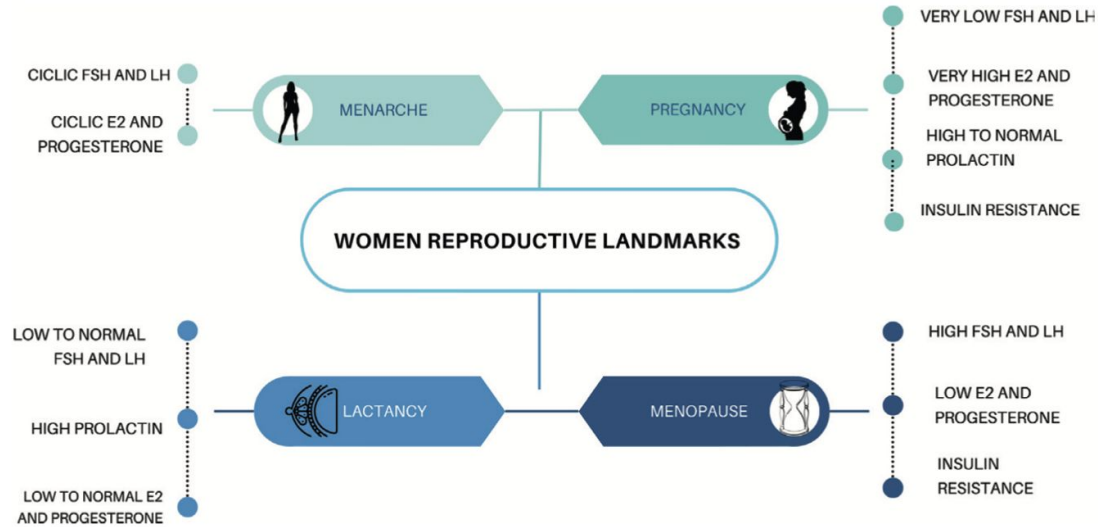
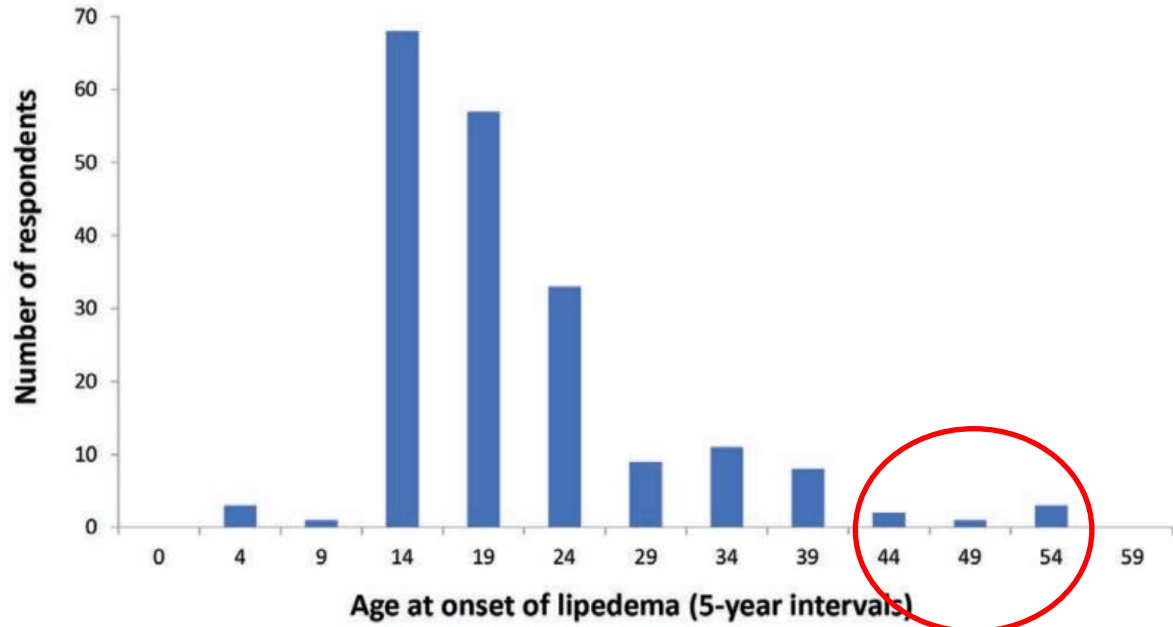
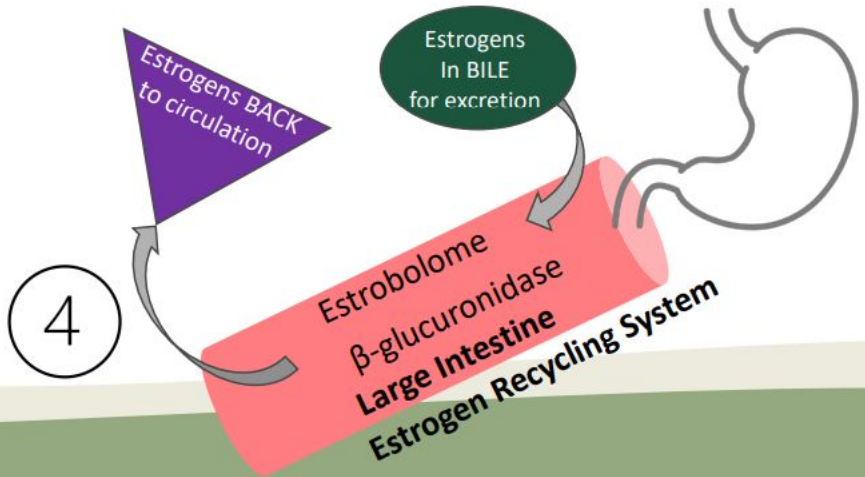
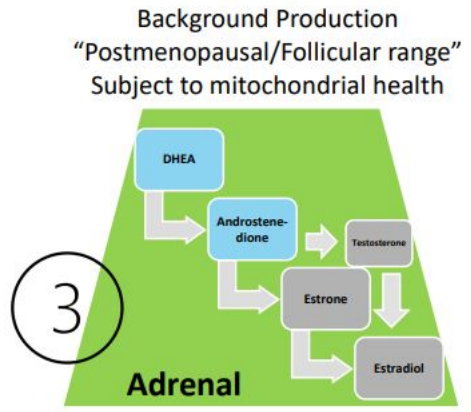
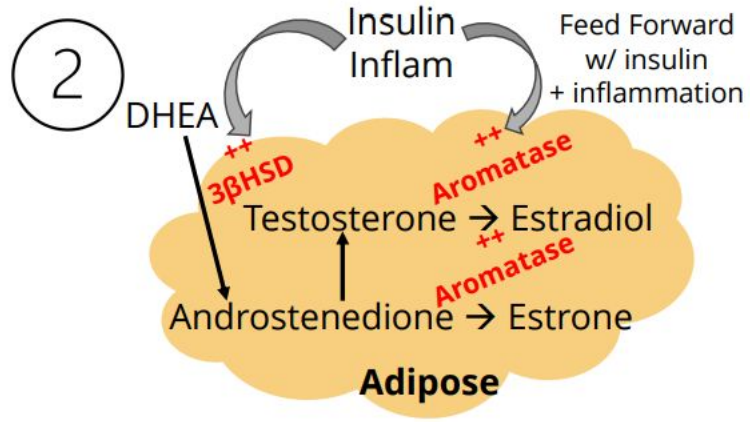
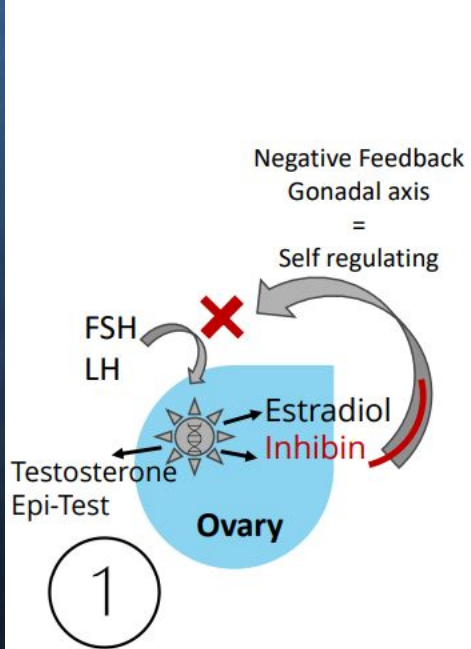


Figure 1.
Reproductive landmarks and hormonal changes related to Lipedema.

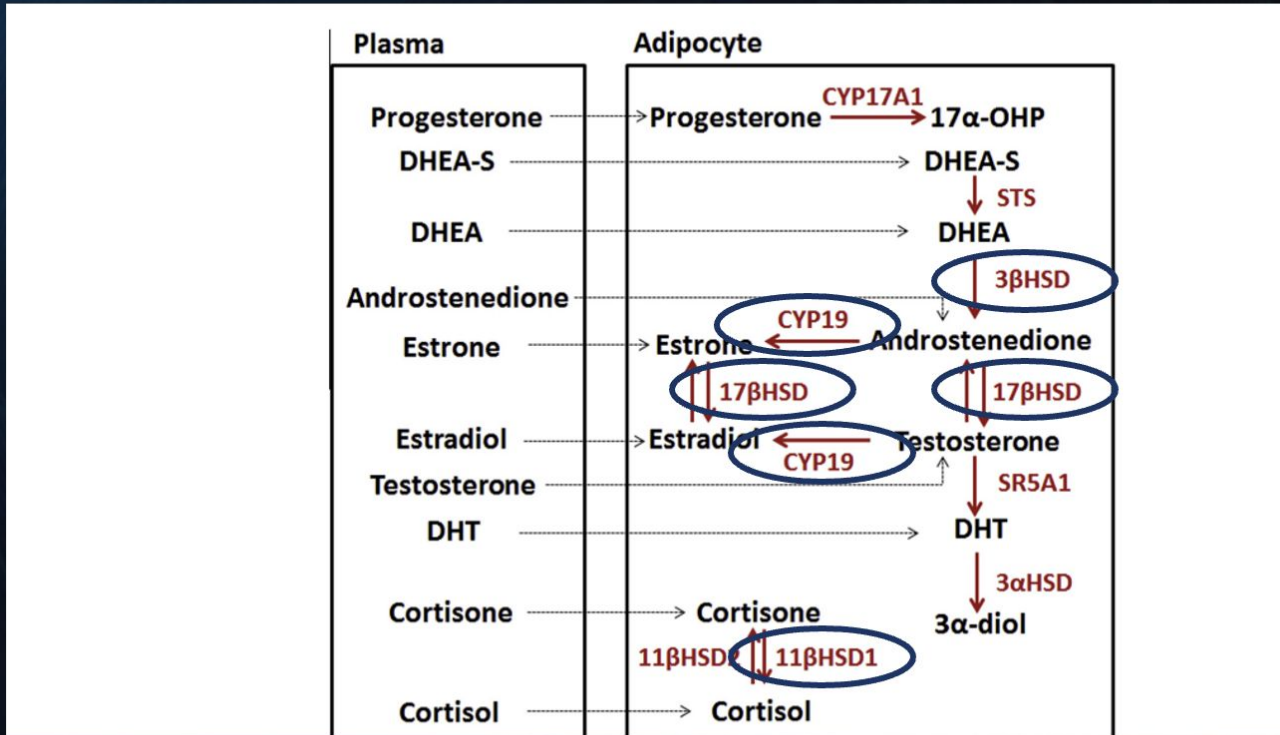


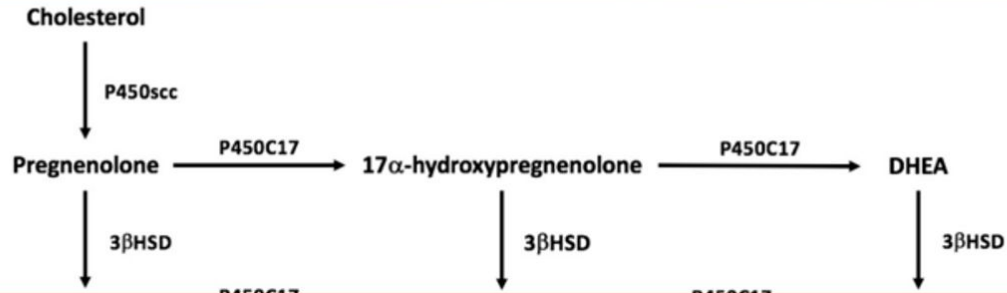
**Por que em
uma doença tão
fortemente ligada
ao estrogênio,
pode haver piora
na menopausa?**





INTRACRINOLOGIA

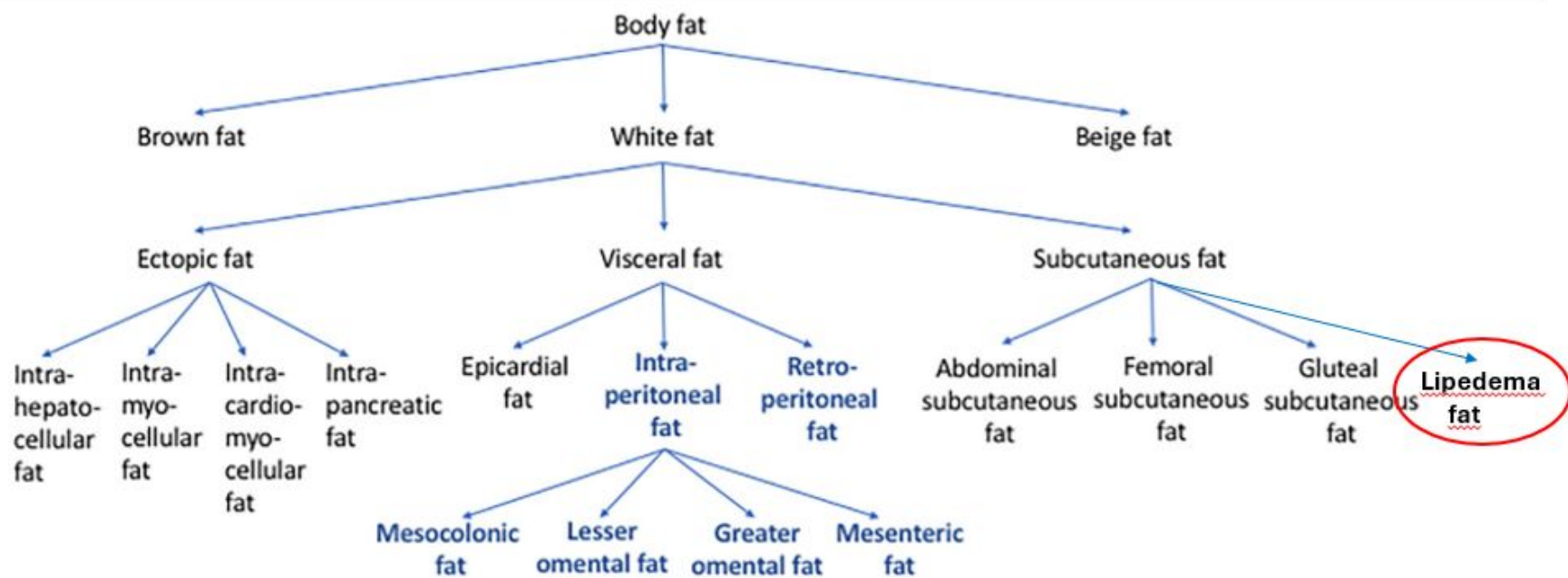




QUEM COORDENA A SÍNTESE HORMONAL NO TA?

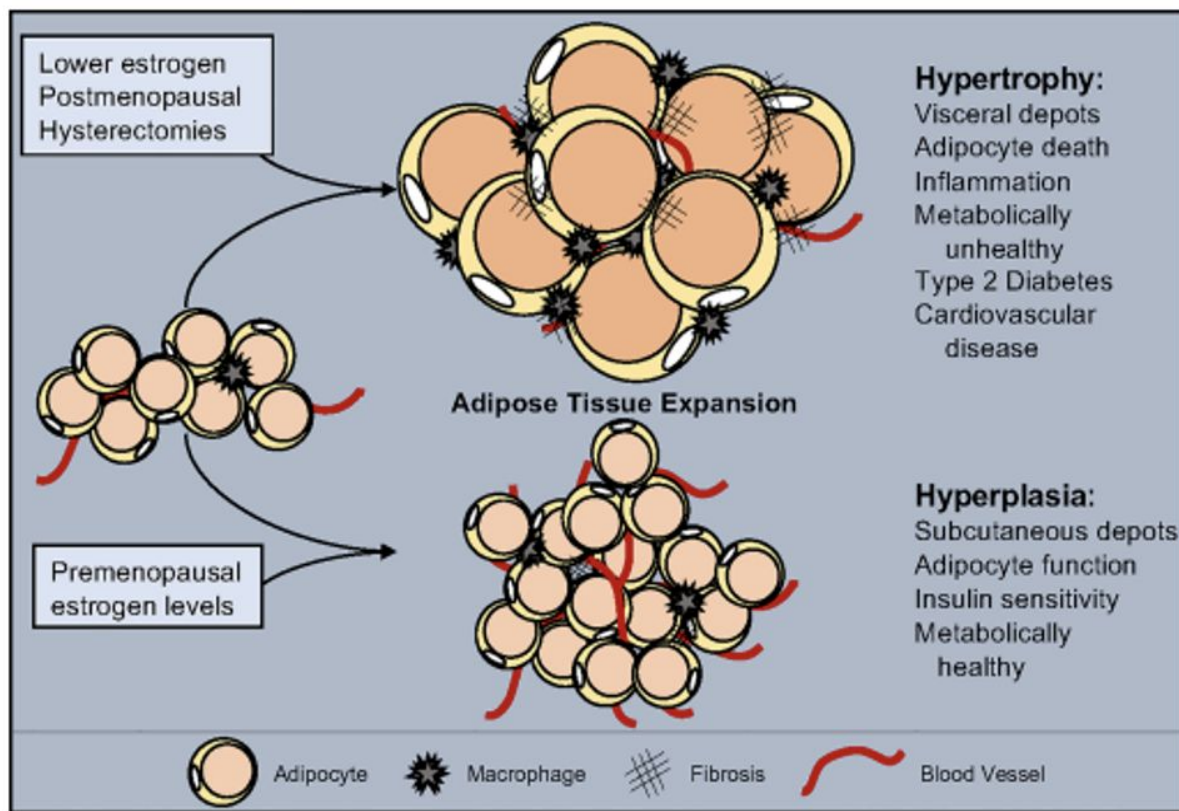
- FSH
- EXPRESSÃO DE ENZIMAS
- INFLAMAÇÃO (SECRETOMA LOCAL)
- IDADE
- IMC (ADIPOSIDADE)

SULT1E1



ADIPÓCITOS LIPEDEMA

- HIPERTROFIA **SIM**
- BETA OXIDAÇÃO INEFICIENTE **SIM**
- ALTERAÇÕES METABOLISMO LIPÍDICO **SEM EVIDÊNCIA ROBUSTA**
- EXPRESSÃO GÊNICA ABERRANTE **SIM**
- ESTADO CRÔNICO DE INFLAMAÇÃO DE BAIXO GRAU **SIM**
- AUMENTO DE CITOCINAS INFLAMATÓRIAS **SIM**
- AUMENTO DO ESTRESSE OXIDATIVO **SIM**
- ALTERAÇÕES DISTRIBUIÇÃO DE RECEPTORES ESTROGÊNICOS ALFA X BETA **SEM EVIDÊNCIA ROBUSTA**





Lipedema donors

Surgery



Adipose tissue



Non-Lipedema donors

Surgery



Adipose tissue



ARTICLE OPEN

Check for updates

Adipocyte and Cell Biology

Key signaling networks are dysregulated in patients with the adipose tissue disorder, lipedema

Musarat Ishaq^{1,2,6}, Nadeeka Bandara¹, Steven Morgan¹, Cameron Nowell³, Ahmad M. Mehdi⁴, Ruqian Lyu⁵, Davis McCarthy³, Dovile Anderson³, Darren J. Creek³, Marc G. Achen^{1,2}, Ramin Shayan^{1,2} and Tara Karnezis^{1,2,6}

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- >900 alterações na composição lipídica
- >600 metabólitos alterados
- expressão diferencial significativa de >3400 genes , incluindo alguns envolvidos na matriz extracelular e nas vias de sinalização do ciclo celular/proliferação

Os adipócitos do lipedema:

Mudança perfil imune

Mudança na expressão de
receptores estrogênicos
alfa e beta

Expressão aumentada de
aromatases

Expressão aumentada de
ZNF 423

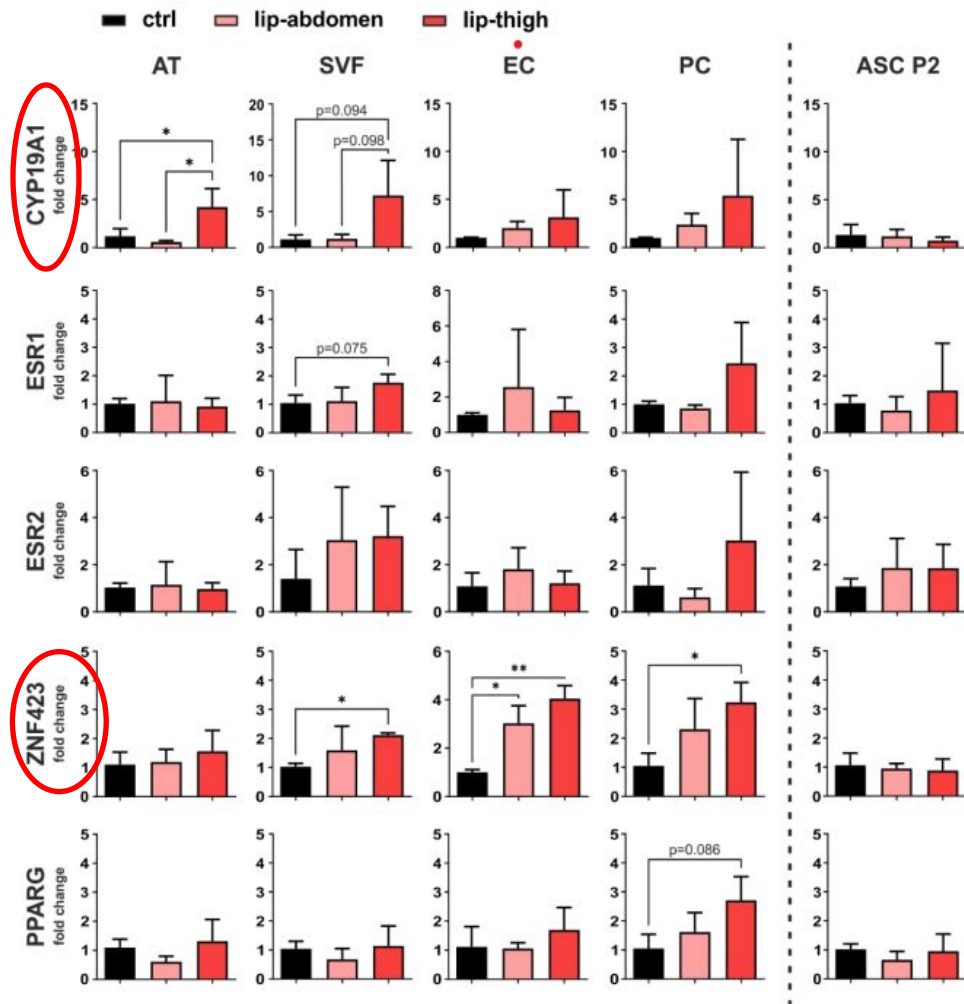
Expressão de citocinas
inflamatórias

Redução da expressão de
IGF1

Hipóxia relativa local

Mastócitos hiperativados
= histamina local

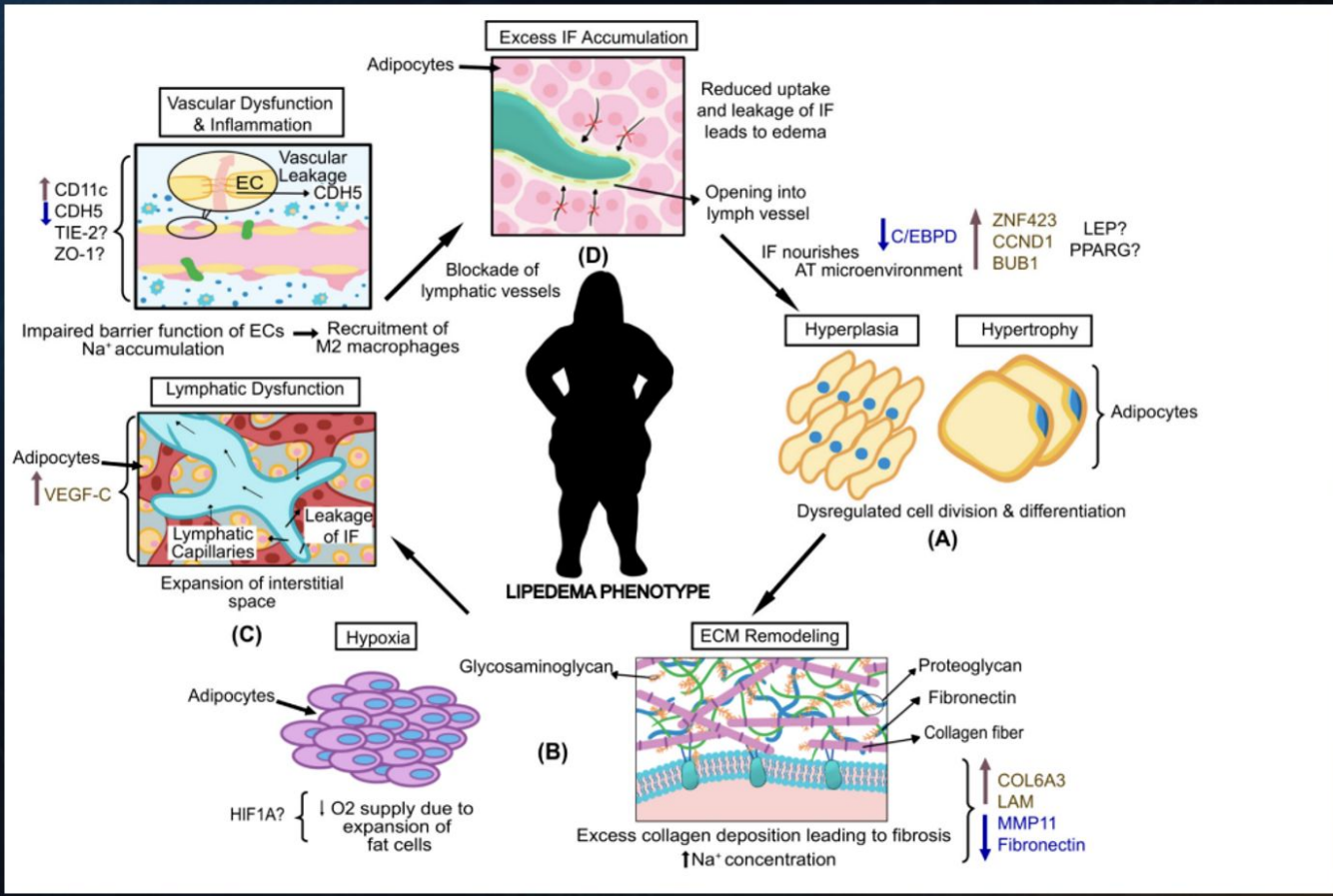
Aumento de
permeabilidade endotelial
local



Article

Multi-Level Analysis of Adipose Tissue Reveals the Relevance of Perivascular Subpopulations and an Increased Endothelial Permeability in Early-Stage Lipedema

Karin Strohmeier ^{1,2}, Martina Hofmann ^{2,3}, Jaroslav Jacak ^{2,3}, Marie-Sophie Narzi ^{1,2}, Marlene Wahlmueller ^{1,2}, Mario Mairhofer ⁴, Barbara Schaedl ^{1,2,5}, Wolfgang Holnthoner ^{1,2}, Martin Barsch ⁶, Matthias Sandhofer ⁶, Susanne Wolbank ^{1,2} and Eleni Priglinger ^{1,2,4}



FUNCTIONAL MEDICINE MATRIX

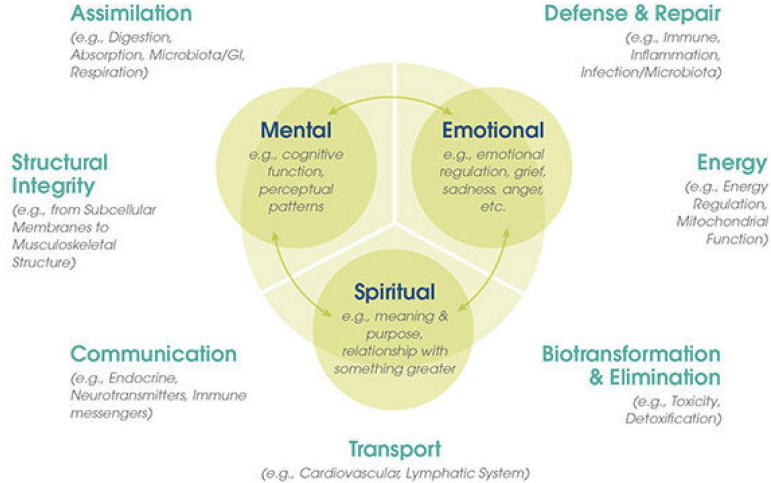
Retelling the Patient's Story

Antecedents
(Predisposing Factors—
Genetic/Environmental)

Triggering Events
(Activators)

Mediators/Perpetuators
(Contributors)

Physiology and Function: Organizing the Patient's Clinical Imbalances



Modifiable Personal Lifestyle Factors

Sleep & Relaxation

Exercise & Movement

Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____

Retelling the Patient's Story

Antecedents

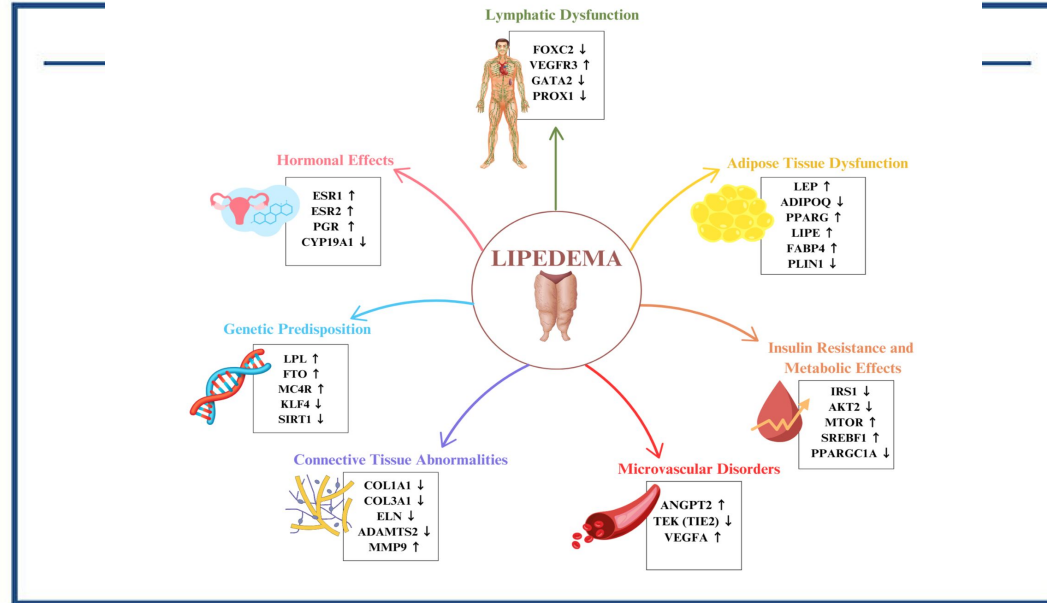
*(Predisposing Factors—
Genetic/Environmental)*

Triggering Events

(Activators)

Mediators/Perpetuators

(Contributors)



Modifiable Personal Lifestyle Factors

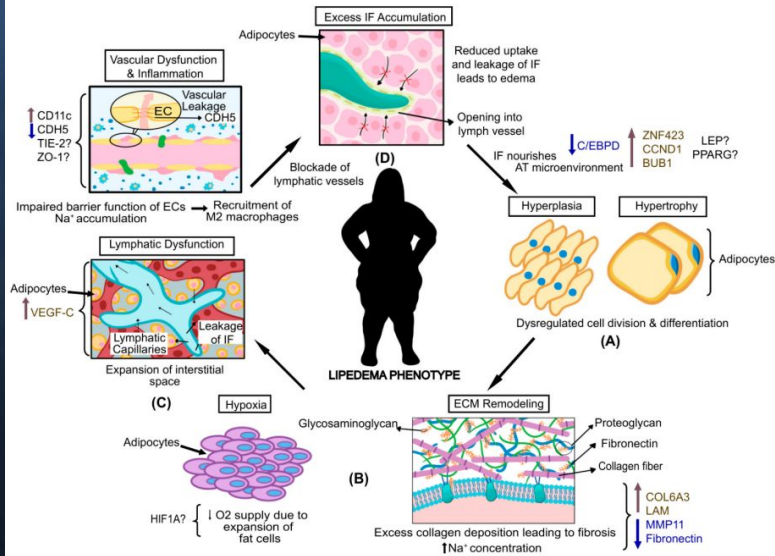
Sleep & Relaxation

Exercise & Movement

Nutrition

Stress

Relationships



Assimilation

(e.g., Digestion, Absorption, Microbiota/GI, Respiration)

Defense & Repair

(e.g., Immune, Inflammation, Infection/Microbiota)

Structural Integrity

(e.g., from Subcellular Membranes to Musculoskeletal Structure)

Energy

(e.g., Energy Regulation, Mitochondrial Function)

Communication

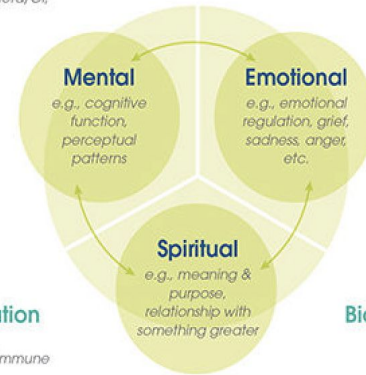
(e.g., Endocrine, Neurotransmitters, Immune messengers)

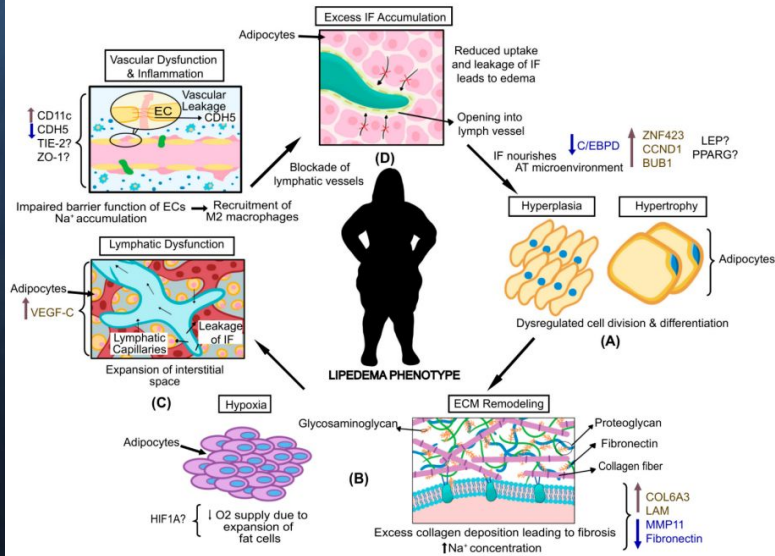
Biotransformation & Elimination

(e.g., Toxicity, Detoxification)

Transport

(e.g., Cardiovascular, Lymphatic System)





Assimilation

(e.g., Digestion, Absorption, Microbiota/GI, Respiration)

Defense & Repair

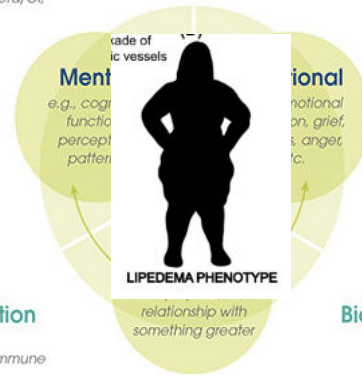
(e.g., Immune, Inflammation, Infection/Microbiota)

Structural Integrity

(e.g., from Subcellular Membranes to Musculoskeletal Structure)

Energy

(e.g., Energy Regulation, Mitochondrial Function)



Communication

(e.g., Endocrine, Neurotransmitters, Immune messengers)

Transport

(e.g., Cardiovascular, Lymphatic System)

FUNCTIONAL MEDICINE MATRIX

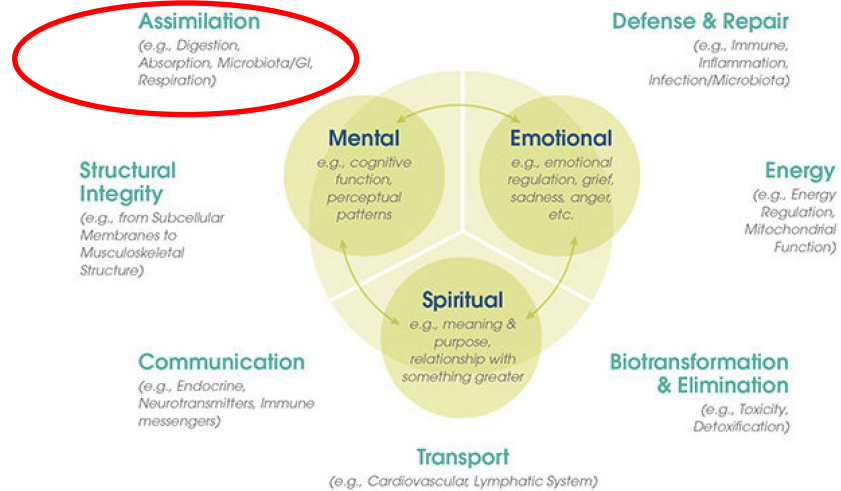
Retelling the Patient's Story

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Physiology and Function: Organizing the Patient's Clinical Imbalances



Modifiable Personal Lifestyle Factors

Sleep & Relaxation

Exercise & Movement

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Name: _____ Date: _____ CC: _____

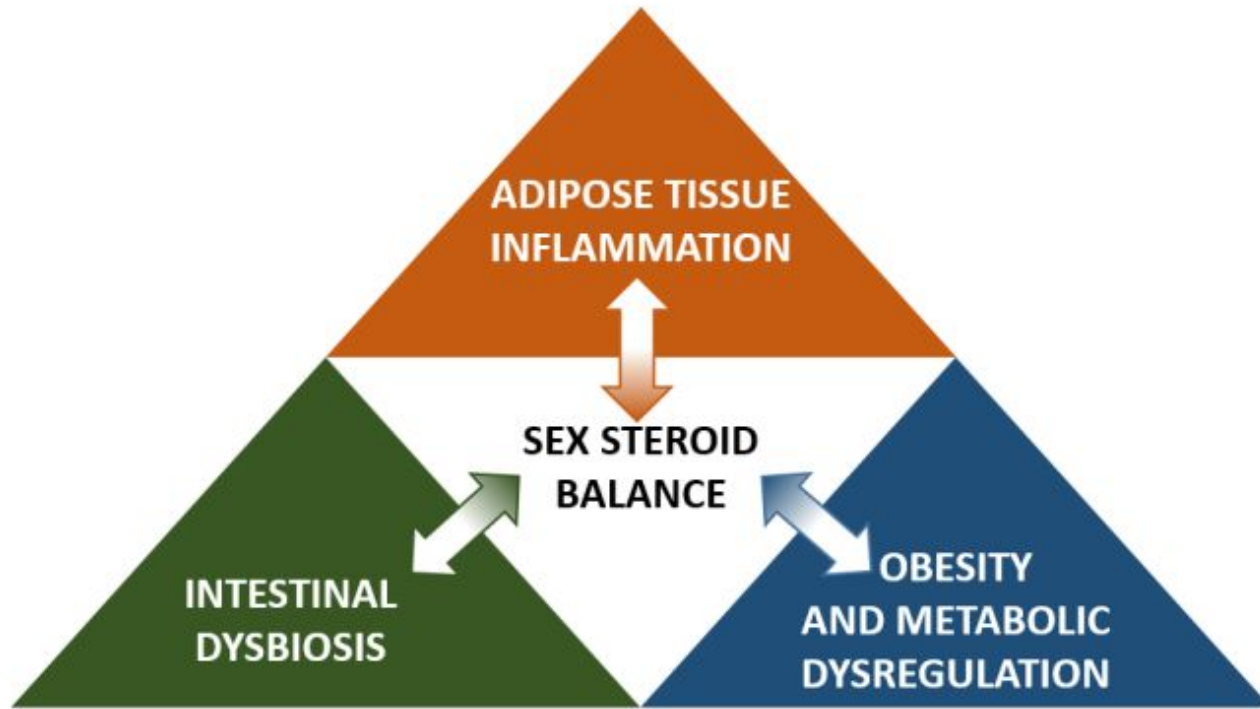
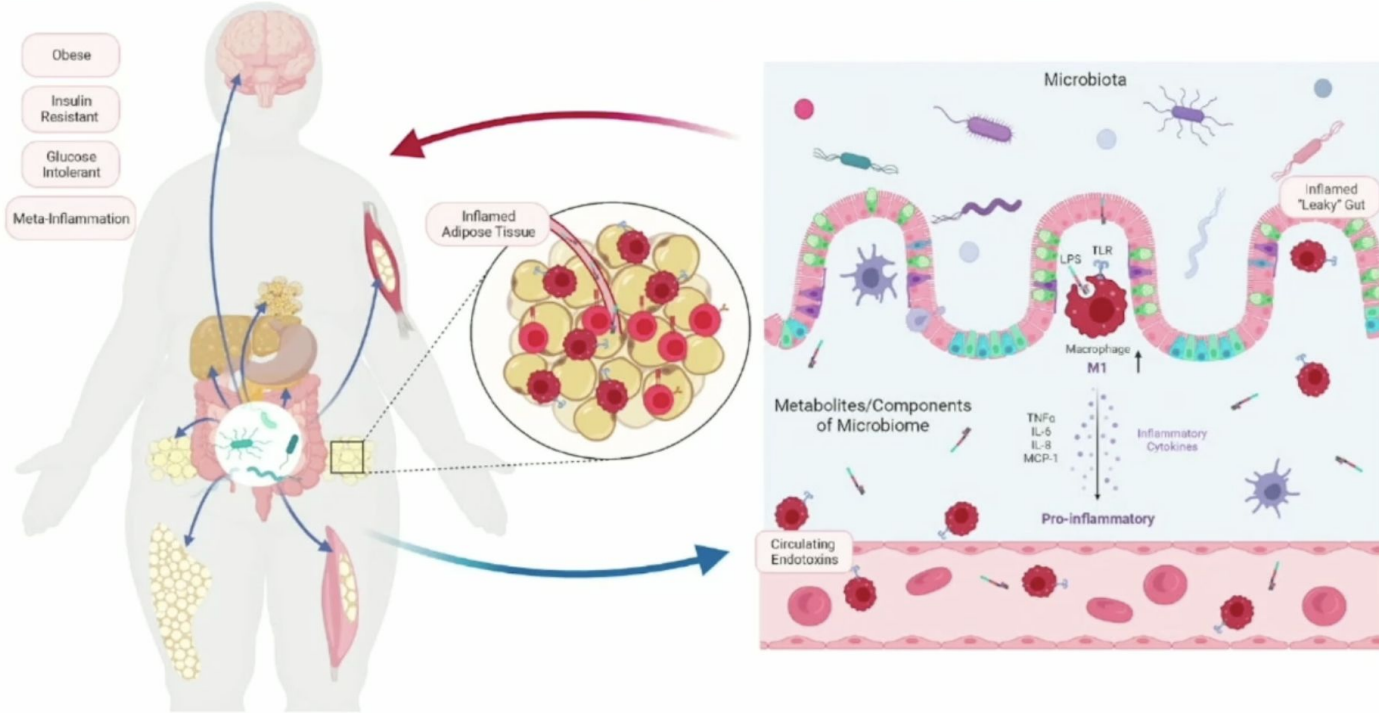


Figure. 7. Potential interrelationship between sex steroids, obesity, and gut microbiota.

Adipose

Gut



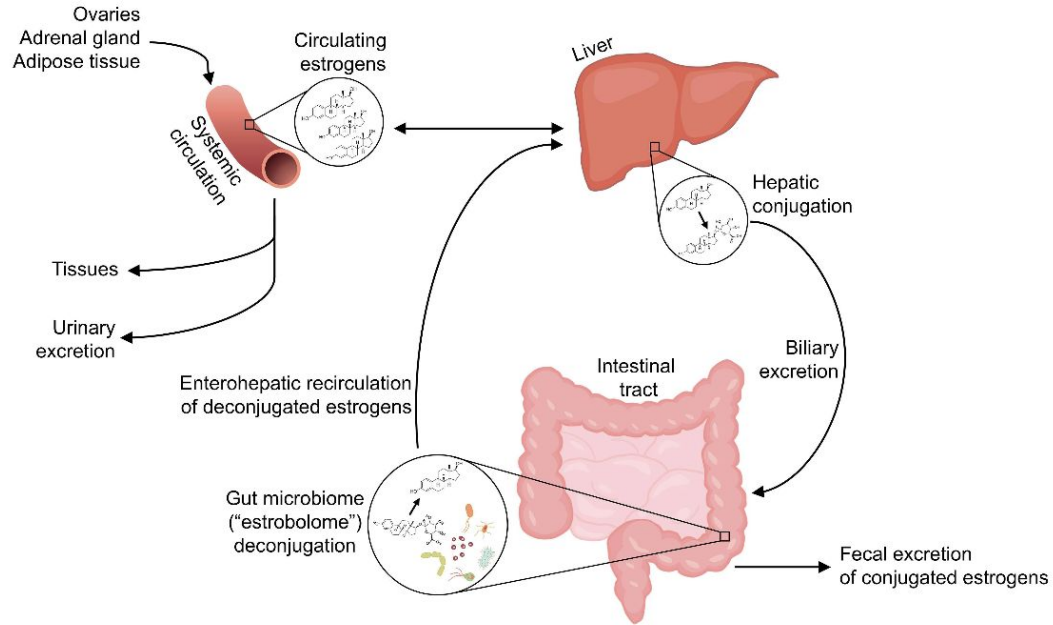


Figure 1 Enterohepatic recirculation of estrogens by the gut microbiome. Estrogens in the systemic circulation, produced by the ovaries, adrenal gland, and adipose or other tissues, undergo first-pass metabolism in the liver, and also may be conjugated with glucuronide or sulfate groups in the liver which facilitates biliary excretion. In the intestinal tract, conjugated estrogens are either excreted in feces, or deconjugated by gut microbiota with β -glucuronidase or sulfatase enzymes, termed the "estrobolome" – this allows estrogens to enter the enterohepatic circulation, and thus subsequently re-enter the systemic circulation and reach other tissues.

OPPORTUNISTIC/OVERGROWTH MICROBES

DYSBIOTIC & OVERGROWTH BACTERIA	Result	Reference
<i>Bacillus</i> spp.	4.14e5	< 1.76e6
<i>Enterococcus faecalis</i>	<dl	< 1.00e4
<i>Enterococcus faecium</i>	2.91e3	< 1.00e4
<i>Morganella</i> spp.	<dl	< 1.00e3
<i>Pseudomonas</i> spp.	<dl	< 1.00e4
<i>Pseudomonas aeruginosa</i>	<dl	< 5.00e2
<i>Staphylococcus</i> spp.	<dl	< 1.00e4
<i>Staphylococcus aureus</i>	1.99e2	< 5.00e2
<i>Streptococcus</i> spp.	<dl	< 1.00e3
COMMENSAL OVERGROWTH MICROBES		
<i>Desulfovibrio</i> spp.	5.01e8	< 7.98e8
Methanobacteriaceae (family)	1.23e8	< 3.38e8
INFLAMMATORY & AUTOIMMUNE-RELATED BACTERIA		
<i>Citrobacter</i> spp.	<dl	< 5.00e6
<i>Citrobacter freundii</i>	<dl	< 5.00e5
<i>Klebsiella</i> spp.	3.12e4 High ↑	< 5.00e3
<i>Klebsiella pneumoniae</i>	8.06e3	< 5.00e4
<i>M. avium</i> subsp. <i>paratuberculosis</i>	<dl	< 5.00e3
<i>Proteus</i> spp.	<dl	< 5.00e4
<i>Proteus mirabilis</i>	<dl	< 1.00e3

INTESTINAL HEALTH MARKERS

DIGESTION	Result	Reference
Steatocrit	<dl	< 15 %
Elastase-1	218	> 200 ug/g
GI MARKERS		
β-Glucuronidase	6307 H	< 2486 U/mL
Occult Blood - FIT	<dl	< 10 ug/g
IMMUNE RESPONSE		
Secretory IgA	470 L	510 - 2010 ug/g
Anti-gliadin IgA	80	< 175 U/L
Eosinophil Activation Protein (EDN, EPX)	0.76	< 2.34 ug/g
INFLAMMATION		
Calprotectin	497 H	< 173 ug/g
ADD-ON TESTS		
Zonulin	96.0	< 175 ng/g

INTESTINAL HEALTH MARKERS

DIGESTION

	Result		Reference
Steatocrit	6		< 15 %
Elastase-1	>750		> 200 ug/g

GI MARKERS

β-Glucuronidase	3350 H		< 2486 U/mL
Occult Blood - FIT	<dl		< 10 ug/g

IMMUNE RESPONSE

Secretory IgA	426 L		510 - 2010 ug/g
Anti-gliadin IgA	96		< 175 U/L
Eosinophil Activation Protein (EDN, EPX)	0.54		< 2.34 ug/g

INFLAMMATION

Calprotectin	13		< 173 ug/g
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ADD-ON TESTS

Zonulin	339.3 H		< 175 ng/g
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gastrointestinal.

Ácidos Graxos de Cadeia Curta Resultado Faixa

Metodologia: GC/MS

Ácidos Graxos de Cadeia Curta	Resultado	Faixa	unidade	Gráfico
Ácidos Graxos de Cadeia Curta	7.1 *L	> 13.6	umol/g	
Butirato	3.2 *L	10.8 - 33.5	%	
Acetato	86.1 *H	44.5 - 72.4	%	
Propianato	9.9	0.0 - 32.0	%	
Valerato	0.7	0.5 - 7.0	%	

Marcadores Funcionais Resultado Faixa

Metodologia: FEIA, EIA, CLIA

Marcadores Funcionais	Resultado	Faixa	unidade	Gráfico
Calprotectina	24.5	0.0 - 50.0	ug/g	
Elastase Pancreática	353.0	> 200.0	ug/g	
IgA Secretora	1053.3	510.0 - 2040.0	ng/mL	
Zonulina	27.4	0.0 - 107.0	ng/mL	
Beta-Glucuronidase	7500.0 *H	368.0 - 4458.0	U/g	
Esteatócrito	<1.0	0.0 - 15.0	%	
Anti-Transglutaminase IgA	<20	0.0 - 100.0	units/L	
pH	7.0	56.3 - 7.7		

Mapeamento do Microbioma (Resumo)

Parasitas e Vermes

Bactérias e Vírus

- Enterococcus faecium
- Streptococcus anginosus.
- Methanobrevibacter smithii
- Desulfovibrio piger
- Enterobacter cloacae complex.
- Klebsiella species
- Klebsiella pneumoniae complex.
- C. difficile, Toxin A
- C. difficile, Toxin B

Fungos e Leveduras

GutCHECK Plus

MACROSCOPIC EXAMINATION AND OCCULT BLOOD		MACROSCOPIC EXAMINATION AND OCCULT BLOOD	
SERVICE	RESULT	SERVICE	INTERPRETATION
Stool Colour	Brown	Mucous	Absent
Stool Form	Semiformed	Occult Blood	Negative

GIT FUNCTIONAL MARKERS					
SERVICE	RESULT	H/L		REF - RANGE	UNITS
Pancreatic Elastase 1	> 800			(>200)	ug/g
b-Glucuronidase	1871			(368-6266)	U/g
Calprotectin	6.5			(<50.0)	ug/g
Secretory IgA	632			(510-2040)	ng/mL
Transglutaminase IgA	1.0			(0.0-100.0)	ug/g
Zonulin	215 H			(0-107)	ng/mL
Steatocrit	< 1.0			(0.0-10.0)	%
pH	7.1			(6.3-7.7)	

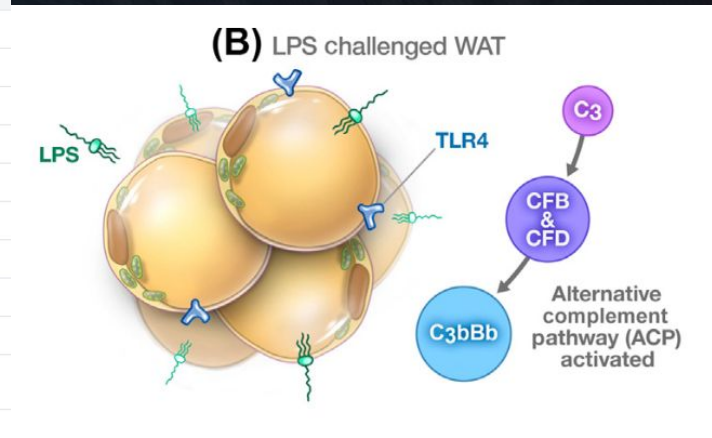
SHORT CHAIN FATTY ACIDS, BENEFICIAL					
SERVICE	RESULT	H/L		REF - RANGE	UNITS
Short Chain Fatty Acids, Beneficial	10.0	L		(>13.6)	umol/g
Butyrate	7.50 L			(10.80-33.50)	%
Acetate	70.70			(44.50-72.40)	%
Propionate	18.50			(0.00-32.00)	%
Valerate	3.20			(0.50-7.00)	%

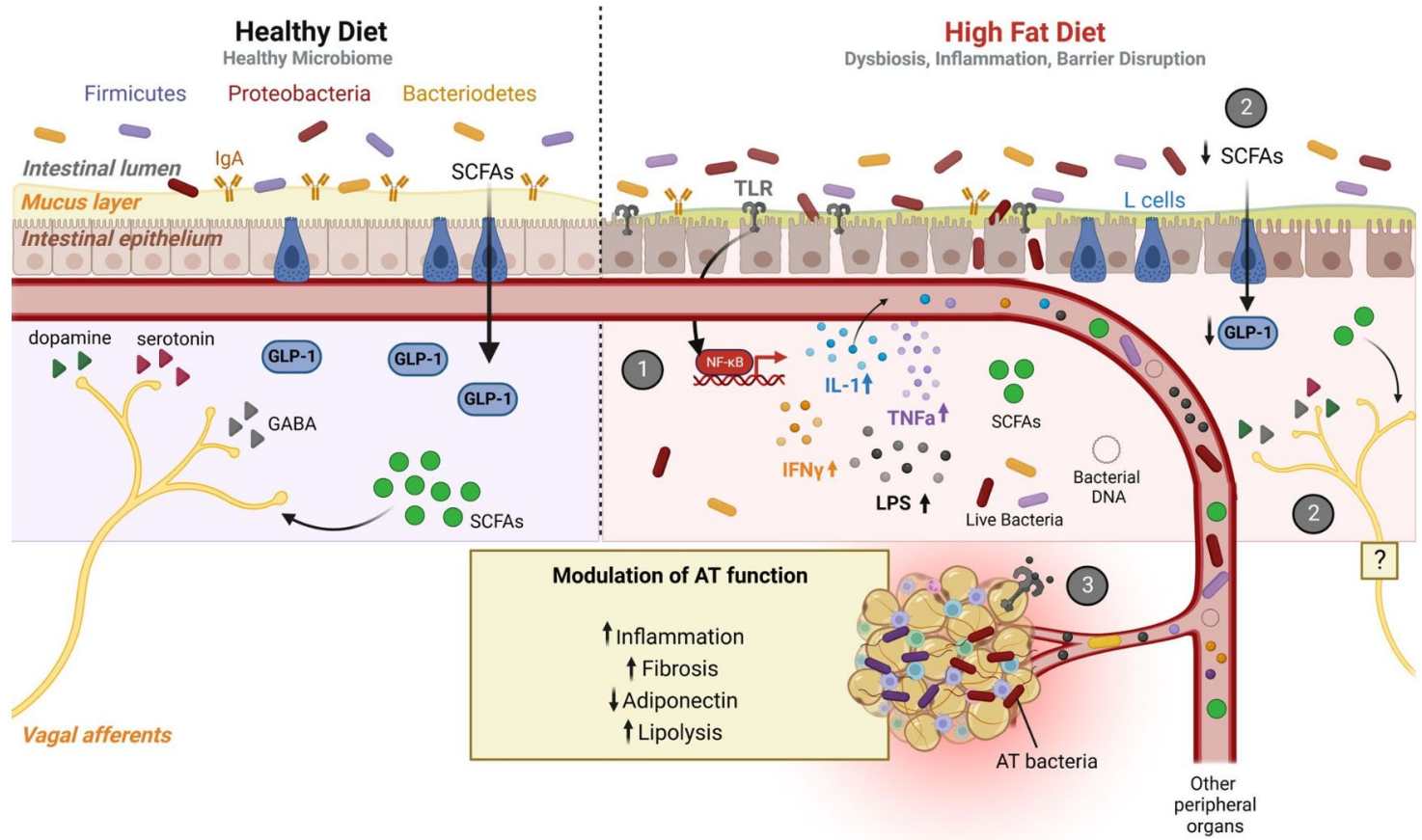
Parasites & Worms
No Parasites or Worms detected

Bacteria and Viruses
Bilophila wadsworthia
Prevotella bivia

Mycology
No Yeasts detected

IMPORTANT BIOCHEMICAL FUNCTIONS					
SERVICE	RESULT	H/L		REF - RANGE	UNITS
Ageing Factors (Oxidative Stress)	0.7120			(<1.0000)	%
Ammonia/Urease Production	0.4500			(<0.5000)	%
Branched Chain AA Production	2.6200			(<5.0000)	%
Carbohydrate Metabolism	4.2500			(3.0000-7.0000)	%
Histamine Production	0.0000			(<1.0000)	%
Iron/Other Ion Metabolism	2.3500			(<3.0000)	%
Indolepropionic Acid (IPA) Production	1.3362			(>1.0000)	%
Lipid Metabolism	4.9100			(4.0000-8.0000)	%
Lipopolysaccharides (LPS) Production	4.6600	H		(<4.0000)	%
Protein/Other Energy Metabolism	15.8000			(9.0000-18.0000)	%
Sulphate Production	4.2000	H		(<3.0000)	%
Trimethylamine (TMA) Production	0.0478			(<0.3000)	%





The IgG Paradox in Lipedema: More Food Sensitivities, Less Antibody Production

Alexandre C. Amato ¹, Juliana S. Amato ², Daniel Benitti ³

¹. Vascular Surgery, Amato - Instituto de Medicina Avançada, Sao Paulo, BRA ². Departamento de Ginecologia, Amato Instituto de Medicina Avançada, São Paulo, BRA ³. Department of Vascular and Endovascular Surgery, Medical Valens Center, São Paulo, BRA

Conclusion:

Lipedema displays a paradoxical IgG signature—more frequent positives despite lower total IgG—consistent with mucosal immune dysregulation (e.g., increased intestinal permeability, immune exhaustion, or dietary monotony). Single IgG metrics had limited discrimination, but a combined score improved classification, supporting IgG profiling as a complementary—not standalone—biomarker for patient stratification and personalized dietary guidance. Collectively, these findings suggest the adipose phenotype may be downstream of broader systemic processes; prospective studies should assess IgG subclasses, barrier markers (e.g., zonulin), and gluten-modulated interventions.

Cureus

Open Access Original
Article

DOI: 10.7759/cureus.41594

Assessing the Prevalence of HLA-DQ2 and HLA-DQ8 in Lipedema Patients and the Potential Benefits of a Gluten-Free Diet

Review began 06/09/2023
Review ended 07/03/2023
Published 07/09/2023

Alexandre C. Amato ¹, Lorena L. Amato ², Daniel Benitti ³, Juliana L. Amato ⁴

- Pacientes com lipedema apresentam prevalência 6 x > que a população geral de alelos DQ2 E DQ8

Original article

Clin Ter 2023; 174 Suppl. 2 (6):256-262

doi: 10.7417/CT.2023.2496

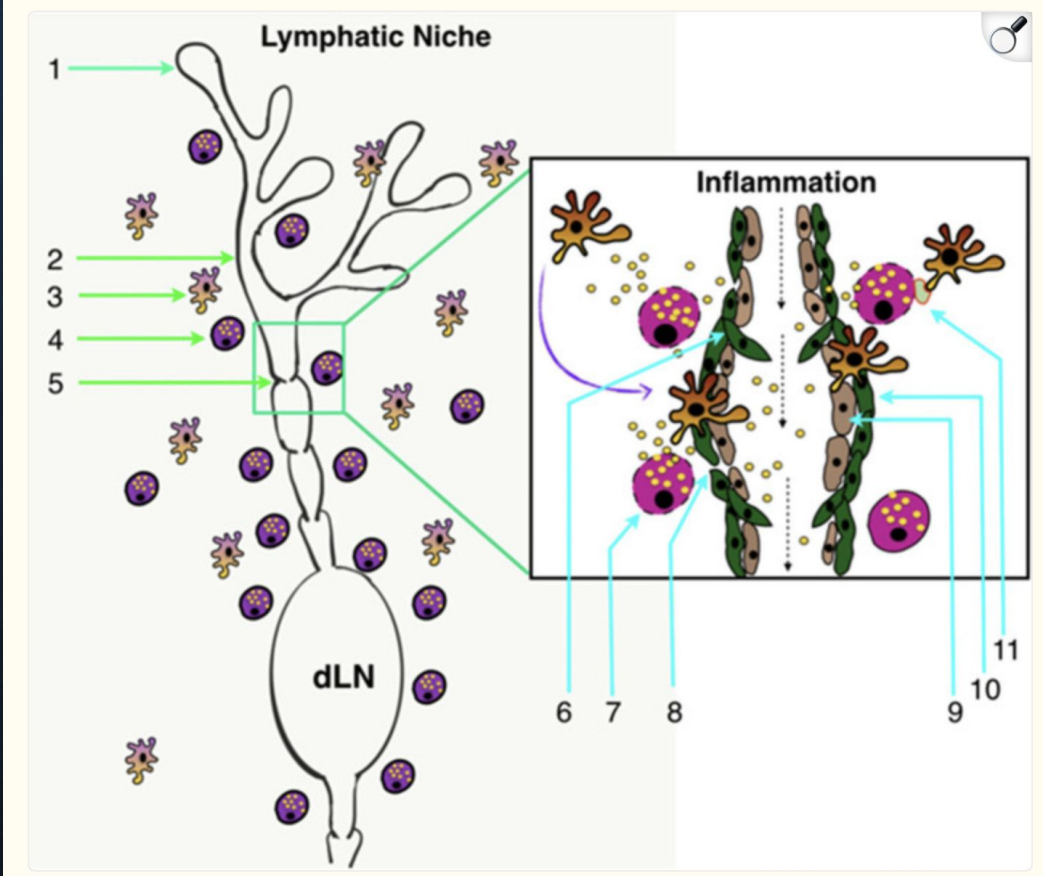
Targeting Mast Cells: Sodium Cromoglycate as a Possible Treatment of Lipedema

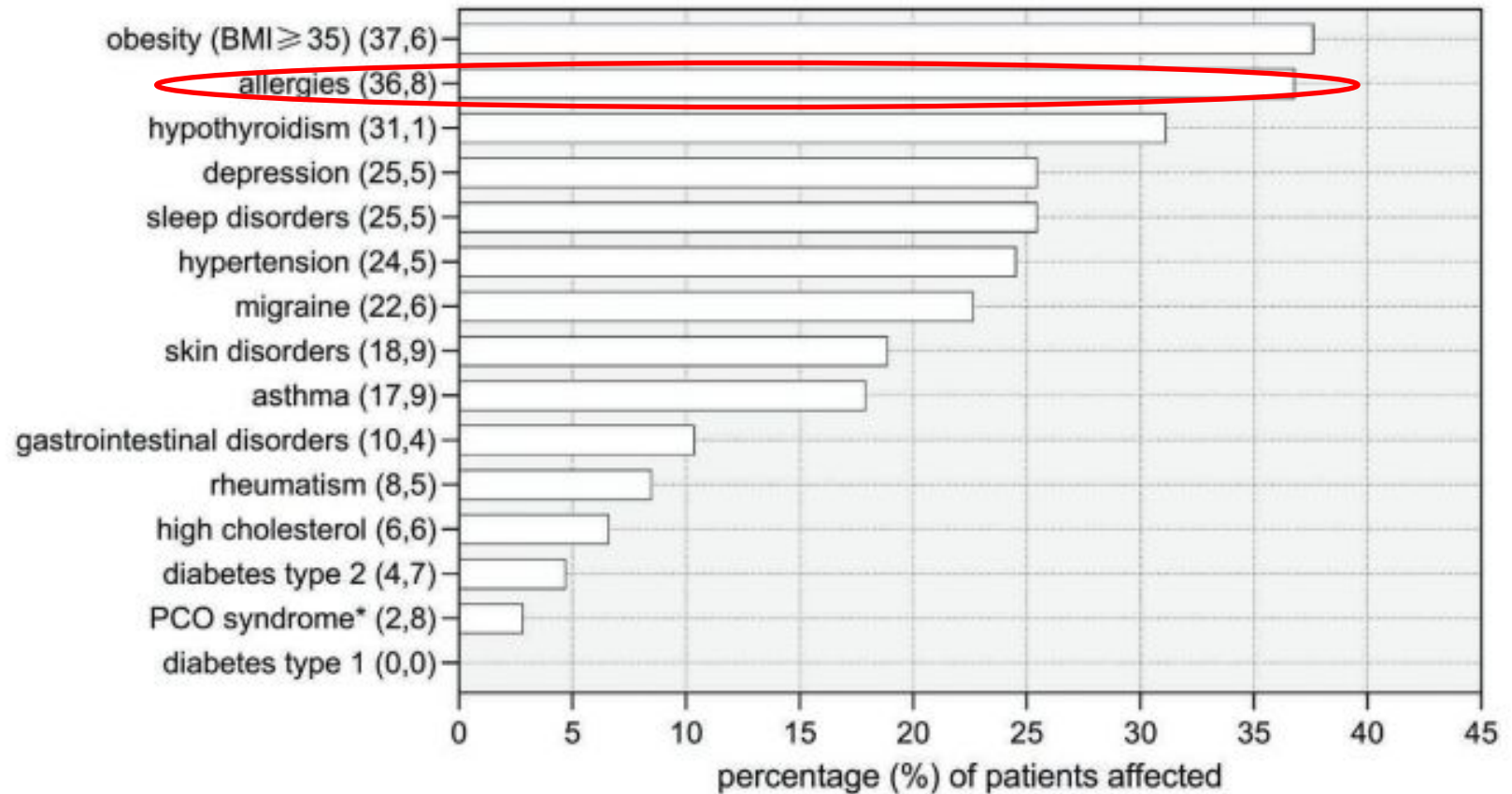
G. Bonetti^{1,2}, S. Michelini³, K. Donato^{4,5}, K. Dhuli¹, M.C. Medori¹, C. Micheletti¹, G. Marceddu³, K.L. Herbst⁶, S. Cristoni⁷, E. Fulcheri⁸, F. Buffelli⁹, M. Bertelli^{1,4,5}



Table 1. Tissue levels of mast cell compounds in the tissue of people with lipedema and controls

	Lipedema tissue (n=3)	Control tissue (n=4)	Lipedema tissue of patients treated with sodium cromoglycate (n=3)
Histamine (pg/mg)	18.00 ± 16.70	0	0
Histidine (pg/mg)	449.00 ± 389.66	29.75 ± 21.82	20.67 ± 17.00
1-Methylhistamine (pg/mg)	3.33 ± 5.77	1.50 ± 3.00	13.67 ± 10.02
Imidazole Acetaldehyde (pg/mg)	5.50 ± 7.78	1.25 ± 2.50	0





Article

Lipedema and Hypermobility Spectrum Disorders Sharing Pathophysiology: A Cross-Sectional Observational Study

Elettra Fiengo ^{1,*} and Andrea Sbarbati ²

Adulthood symptoms (Lipedema vs Lymphedema)

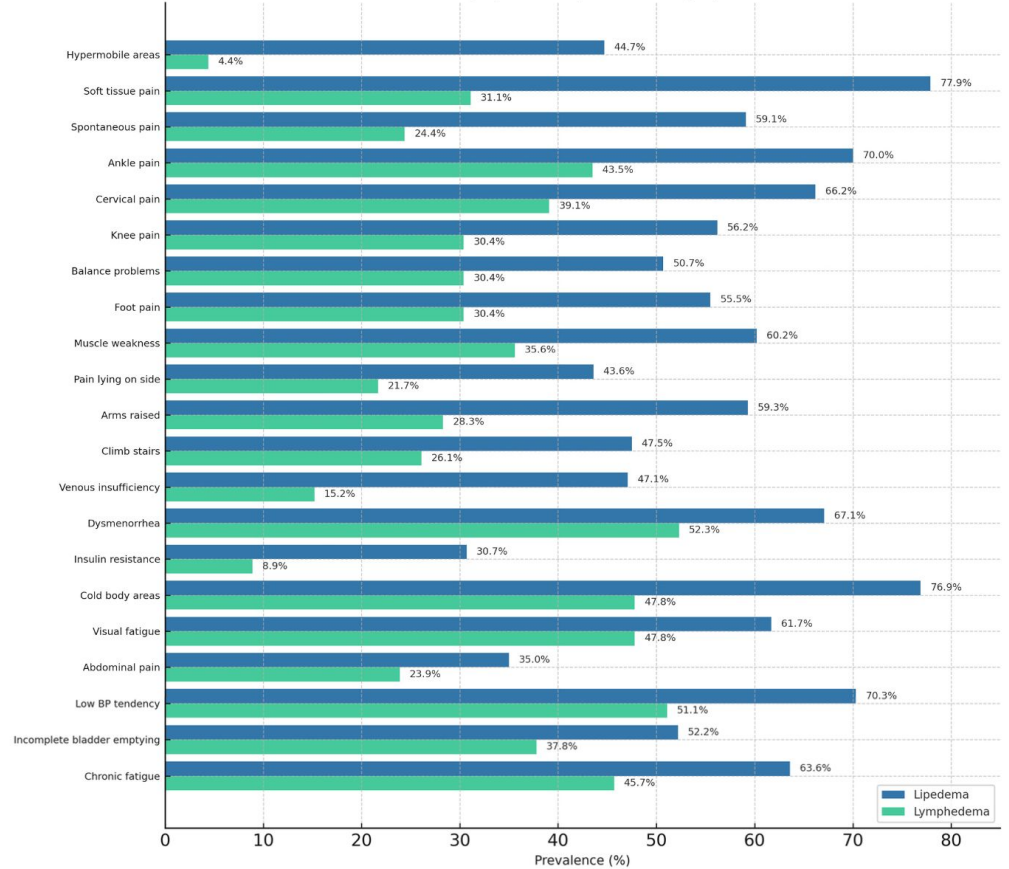


Figure 2. Adult symptoms in patients with lipedema and lymphedema.

FUNCTIONAL MEDICINE MATRIX

Retelling the Patient's Story

Antecedents
(Predisposing Factors—
Genetic/Environmental)

Triggering Events
(Activators)

Mediators/Perpetuators
(Contributors)

Physiology and Function: Organizing the Patient's Clinical Imbalances

Assimilation
(e.g., Digestion,
Absorption, Microbiota/GI,
Respiration)

Defense & Repair
(e.g., Immune,
Inflammation,
Infection/Microbiota)

Structural Integrity
(e.g., from Subcellular
Membranes to
Musculoskeletal
Structure)

Energy
(e.g., Energy
Regulation,
Mitochondrial
Function)



Biotransformation & Elimination
(e.g., Toxicity,
Detoxification)

Modifiable Personal Lifestyle Factors

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Exercise & Movement

Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____

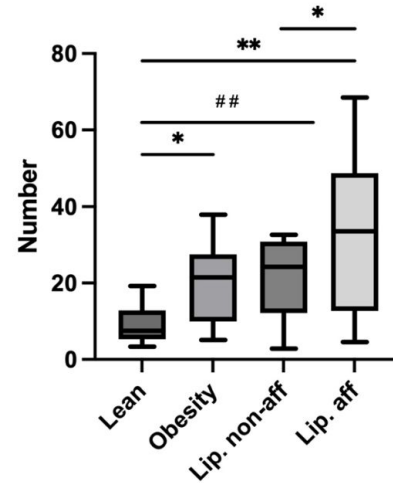
Received: 31 July 2024 | Revised: 28 October 2024 | Accepted: 19 December 2024
DOI: 10.1002/oby.24244

ORIGINAL ARTICLE
Obesity Biology and Integrated Physiology

Obesity THE OBESITY SOCIETY WILEY

Endothelial cell alterations in capillaries of adipose tissue from patients affected by lipedema

(E) CD68+Macrophages density



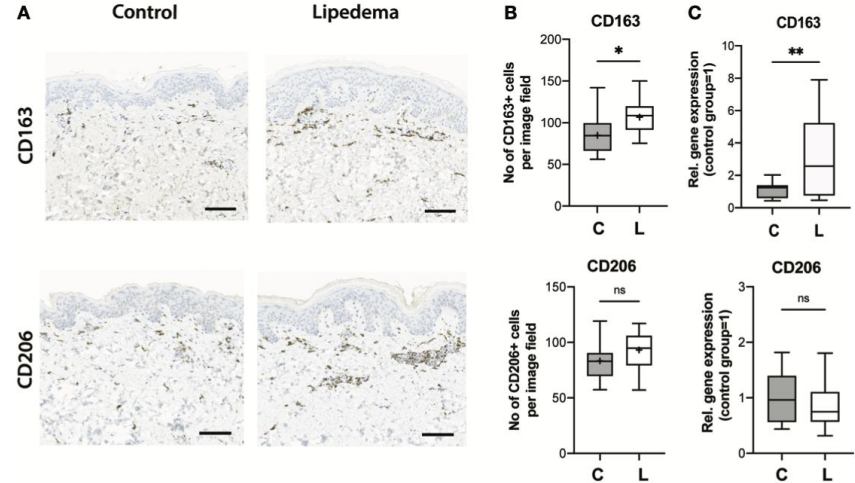
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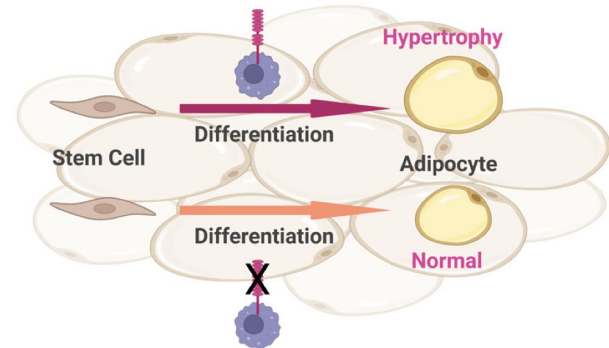
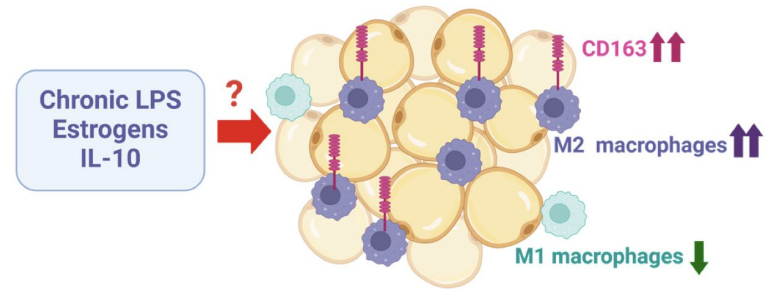
A distinct M2 macrophage infiltrate and transcriptomic profile decisively influence adipocyte differentiation in lipedema



Review

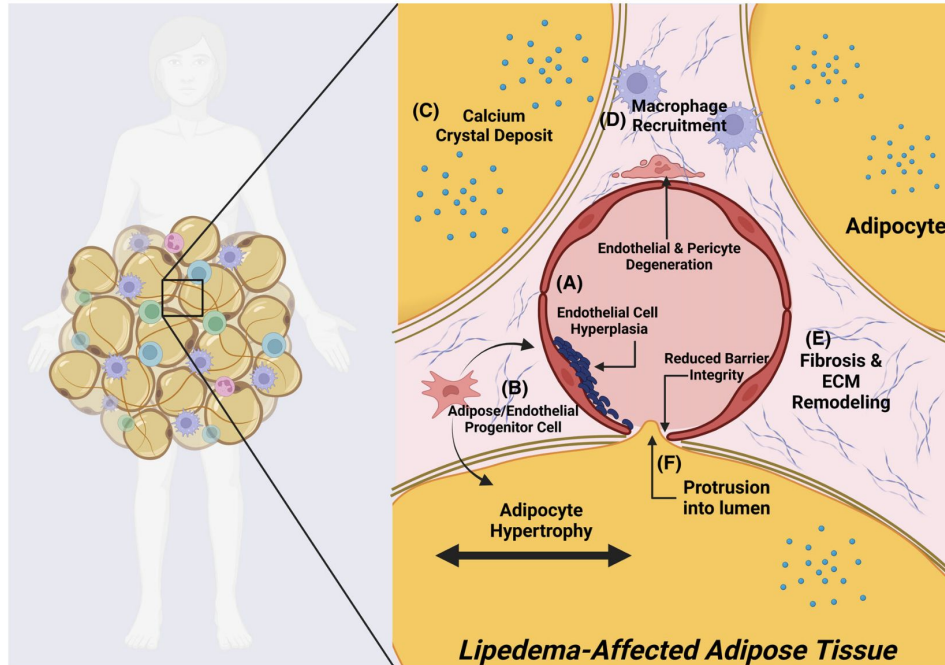
Lipedema: A Disease Triggered by M2 Polarized Macrophages?

Thomas Grewal ¹, Sally Kempa ² and Christa Buechler ^{3,*}



Vascular remodeling of adipose tissue in lipedema: endothelial dysfunction as an emerging culprit in a mysterious disease

Timothy D. Allerton



OPEN Increased levels of VEGF-C and macrophage infiltration in lipedema patients without changes in lymphatic vascular morphology

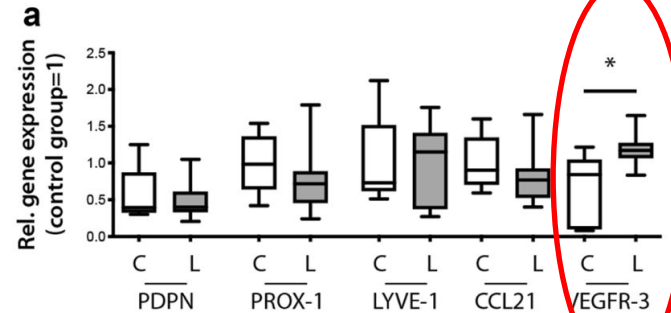
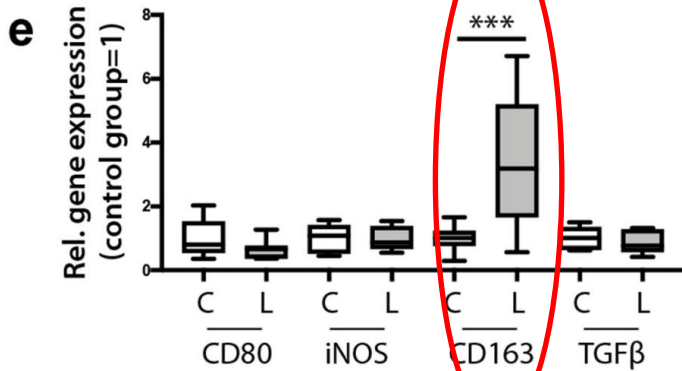


TABLE 2 Systemic metabolic parameters and biochemical markers.

Variables	Control group (n = 13)	Lipedema group (n = 13)	P Value
Carbohydrate metabolism			
Insulin (pmol/L)	25.51 ± 15.21	47.01 ± 21.37	0.014
C-Peptide (pmol/L)	585.64 ± 181.04	584.23 ± 215.68	0.626
HbA1c (%)	6.73 ± 0.85	5.55 ± 0.62	<0.001
Sex hormones			
Testosterone	0.93 (0.78 – 1.26)	0.83 (0.67 – 1.12)	0.424
17β-Estradiol (pmol/l)	88.42 (32.72 – 315.41)	74.39 (38.51 – 209.81)	0.712
Progesterone (nmol/l)	0.67 (0.41 – 1.37)	2.12 (0.74 – 2.51)	0.180
Liver/Pancreas enzymes			
ALAT (μkat/L)	0.19 ± 0.07	0.48 ± 0.13	<0.001
ASAT (μkat/L)	0.40 ± 0.10	0.58 ± 0.75	0.005*
gGT (μkat/L)	0.17 (0.13 – 0.30)	0.24 (0.18 – 0.38)	0.136
Lipase (μkat/L)	0.55 ± 0.19	0.56 ± 0.16	0.719
Lipid profile			
Total-cholesterol (mmol/L)	4.55 ± 0.77	5.84 ± 0.70	<0.001
HDL-C (mmol/L)	1.38 ± 0.28	1.52 ± 0.45	0.521
LDL-C (mmol/L)	2.38 ± 0.66	3.38 ± 0.68	0.002
Triglycerides (mmol/L)	1.24 ± 0.65	1.51 ± 0.70	0.369
Adipokines			
Adiponectin (μg/mL)	3.28 ± 1.00	4.69 ± 1.99	0.038
Leptin (ng/mL)	22.34 ± 16.17	26.15 ± 11.57	0.305
Inflammation			
TNFα (pg/mL)	1.55 ± 0.46	2.19 ± 0.71	0.020
CRP (mg/L)	2.09 (0.98 – 5.45)	2.25 (1.26 – 4.12)	0.290
Oxidative stress			
SOD activity (U/ml)	0.94 (0.86 – 0.99)	1.42 (1.22 – 1.53)	<0.001
Catalase activity (U/ml)	7.61 (5.57 – 16.28)	62.47 (57.57 – 63.71)	<0.0001
MDA concentration (nmol/ml)	0.49 ± 0.05	0.53 ± 0.05	0.012

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Neurotransmitters, Immune
messengers)

**Biotransformation
& Elimination**
(e.g., Toxicity,
Detoxification)

Transport
(e.g., Cardiovascular, Lymphatic System)

Modifiable Personal Lifestyle Factors

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Name: _____ Date: _____ CC: _____



Article

Selenium Deficiency in Lymphedema and Lipedema—A Retrospective Cross-Sectional Study from a Specialized Clinic

Table 3. Selenium concentration in whole blood in lipedema and lipo-lymphedema.

Characteristic	Selenium Concentration in Whole Blood *, $\mu\text{g/L}$, Mean (SD)		
	Lipedema	Lipo-Lymphedema	<i>p</i> Value †
Sample, <i>n</i>	198	168	
All	101.7 \pm 12.3	98.4 \pm 15.6	0.0127
Selenium deficiency, <i>n</i> (%)	83 (41.9)	89 (53.0)	0.0347
BMI < 30	101.7 \pm 14.2	103.3 \pm 13.3	0.7343
BMI \geq 30 < 40	101.8 \pm 11.1	97.7 \pm 18.9	0.0692
BMI \geq 40	101.5 \pm 14.0	96.4 \pm 14.4	0.0254

* Unless otherwise specified; † *p* values were calculated using χ^2 test for categorical variables and Student's *t* test or Mann–Whitney test. *p* < 0.05 are in bold letters.

Is subcutaneous adipose tissue expansion in people living with lipedema healthier and reflected by circulating parameters?

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Review

Lipedema: Insights into Morphology, Pathophysiology, and Challenges

Ankita Poojari [†] , Kapil Dev [†] and Atefeh Rabiee ^{*†}

Thermogenic function

UCP1

- Involved in uncoupling respiration from ATP synthesis to generate heat in brown and beige adipocytes aiding adaptive thermogenesis [220–222].
- Unchanged [22]

Os adipócitos na gordura do lipedema, particularmente no tecido adiposo subcutâneo (TAC) nas pernas e braços, têm uma resposta lipolítica atenuada à norepinefrina e outras catecolaminas.

FUNCTIONAL MEDICINE MATRIX

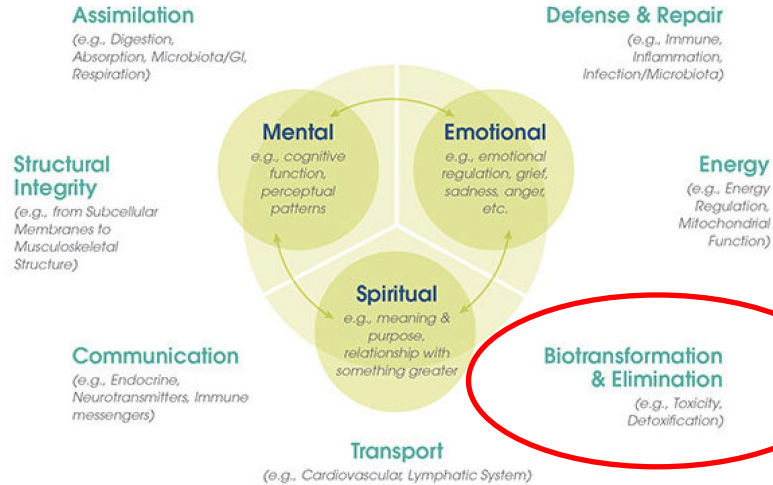
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Sleep & Relaxation

Exercise & Movement

Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____

FAT-SOLUBLE TOXINS

Phase 1
(Cytochrome P450 Enzymes)

Oxidation
Reduction
Hydrolysis
Hydration
Dehalogenation

Nutrients Needed

- Vitamins B2, B3, B6, B12
- Folic Acid
- Glutathione
- Flavonoids

I
N
T
E
R
M
E
D
I
A
R
Y
M
E
T
A
B
O
L
I
S
M

Phase 2
(Conjugation Pathways)

Sulfation
Glucoronidation
Glutathione Conjugation
Acetylation
Amino Acid Conjugation
Methylation

Nutrients Needed

- | | | |
|---------------|-------------------|--------------|
| • Methionine | • Vitamin B5, B12 | • Glutamine |
| • Cysteine | • Vitamin C | • Folic Acid |
| • Magnesium | • Glycine | • Choline |
| • Glutathione | • Taurine | |

WATER-SOLUBLE WASTE

Eliminated via:

Urine
Bile
Stool

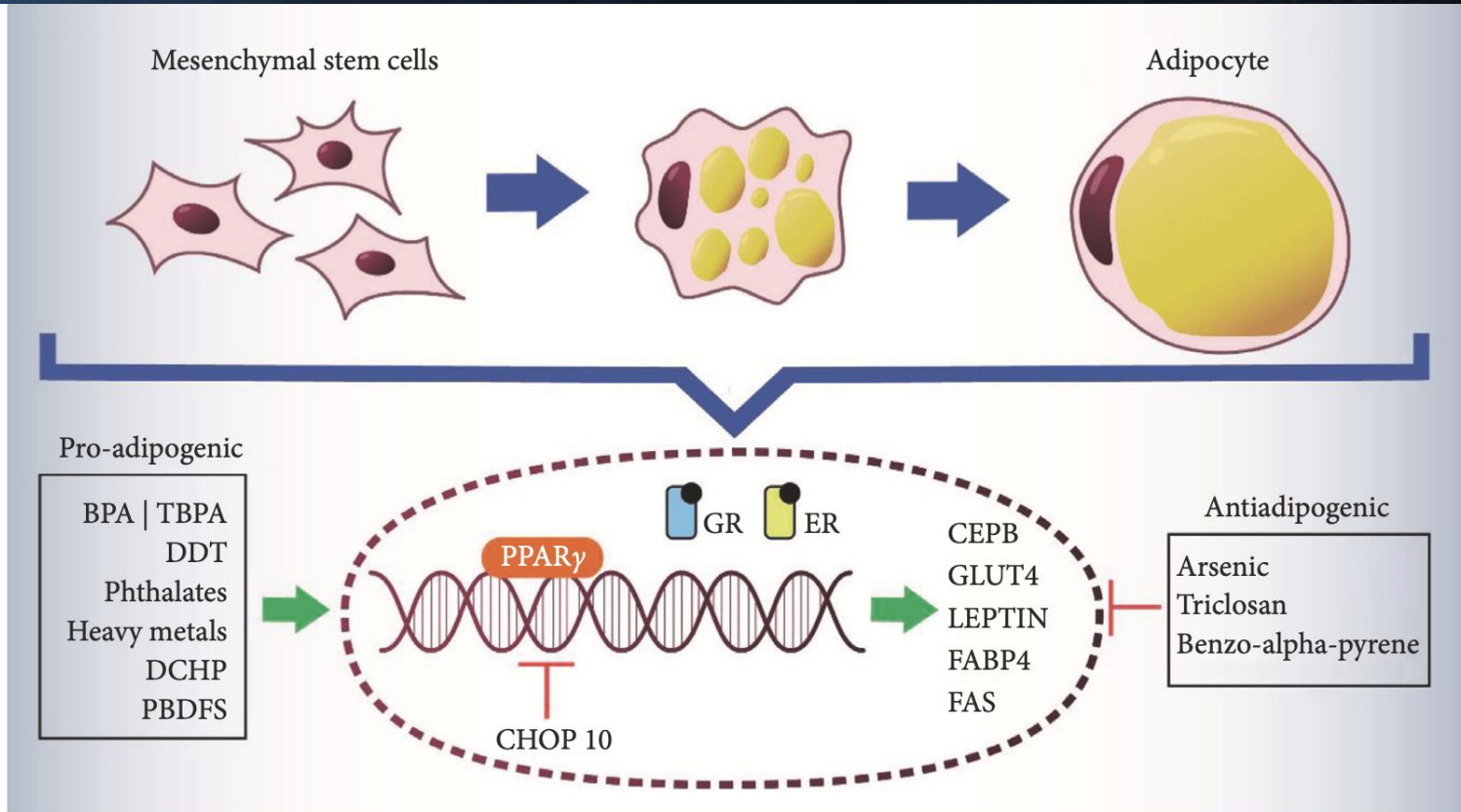


FIGURE 1: Schematic representation of effects of endocrine disruptors on adipogenic differentiation.

FUNCTIONAL MEDICINE MATRIX

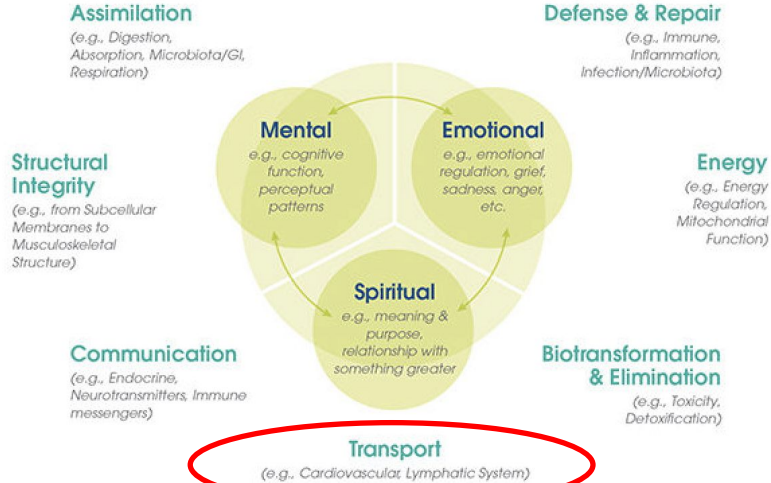
Retelling the Patient's Story

Antecedents
(Predisposing Factors—
Genetic/Environmental)

Triggering Events
(Activators)

Mediators/Perpetuators
(Contributors)

Physiology and Function: Organizing the Patient's Clinical Imbalances



Modifiable Personal Lifestyle Factors

Sleep & Relaxation

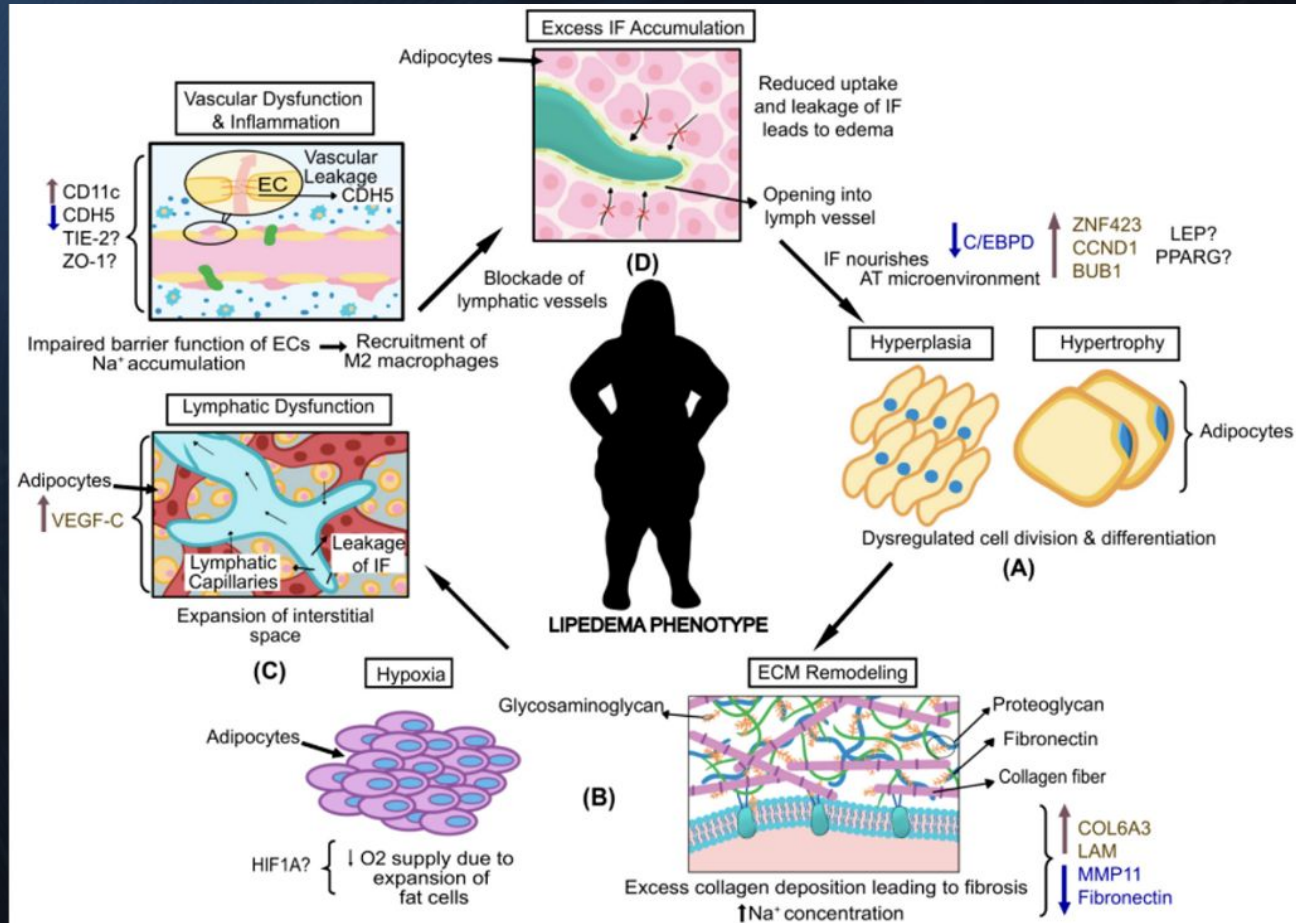
Exercise & Movement

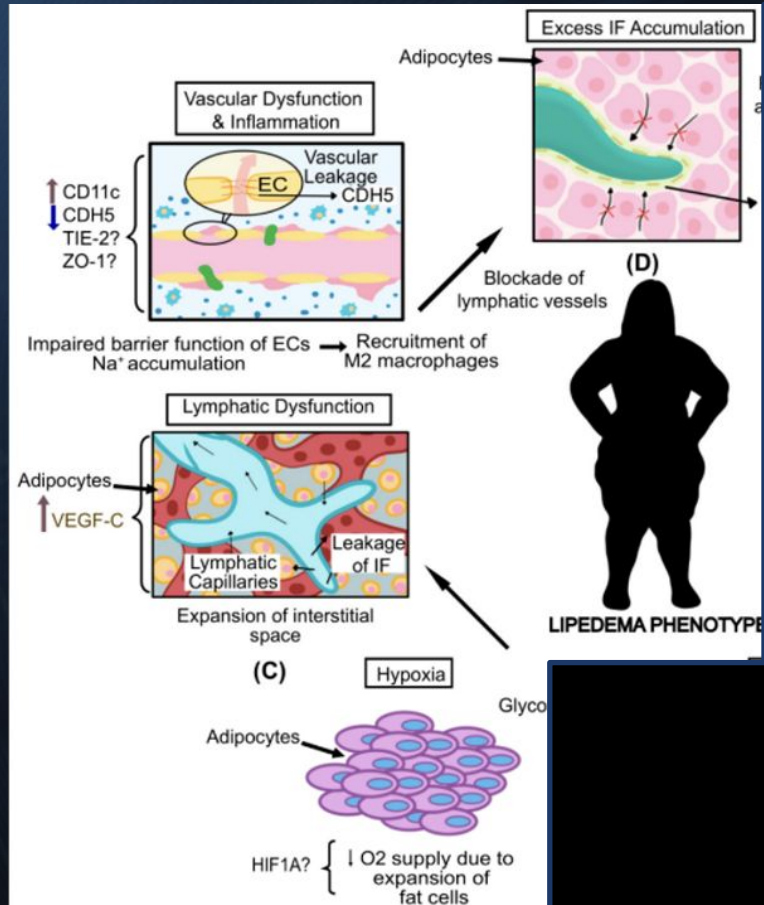
Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____





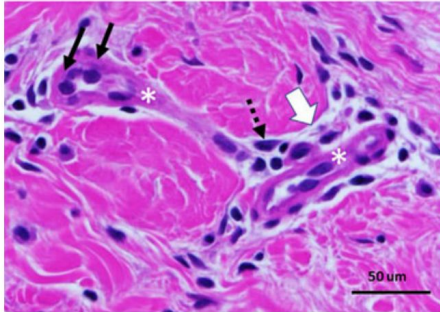
ORIGINAL ARTICLE

Open Access

Interstitial Fluid in Lipedema and Control Skin

Marisol Allen,¹ Michael Schwartz,² and Karen L. Herbst^{1,3,4,*}

A Dermal Skin Vessel Lumens: Stage 1 Lipedema



B Dermal Skin Vessel Lumens: Stage 3 Lipedema

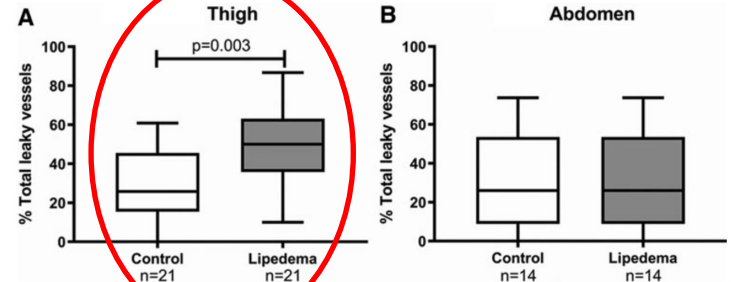
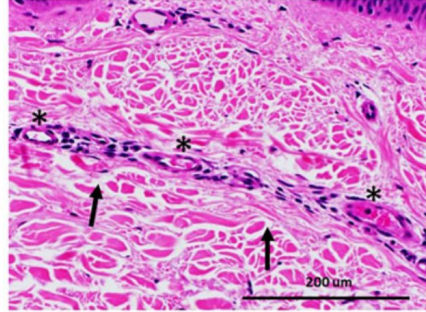


FIG. 2. Leaky vessel phenotype in women with and without lipedema (controls) matched for age and BMI for the thigh (**A**) and matched separately for age and BMI for the abdomen (**B**). Capped lines show significant differences between groups. Significance by unpaired t-test. BMI, body mass index.

Received: 21 December 2021 | Revised: 4 April 2022 | Accepted: 6 April 2022
DOI: 10.1002/oby.23458

ORIGINAL ARTICLE
Clinical Trials and Investigations

Obesity
A WILEY-John Wiley & Sons Company

Lymphatic function and anatomy in early stages of lipedema

John C. Rasmussen¹ | Melissa B. Aldrich¹ | Caroline E. Fife^{2,3} |
Karen L. Herbst⁴ | Eva M. Sevick-Muraca¹

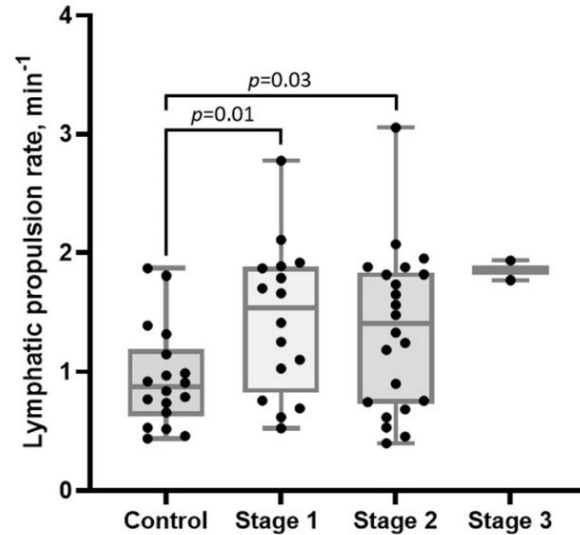


FIGURE 4 Whisker plot of the propulsion rates observed in the control individuals and individuals with lipedema

FUNCTIONAL MEDICINE MATRIX

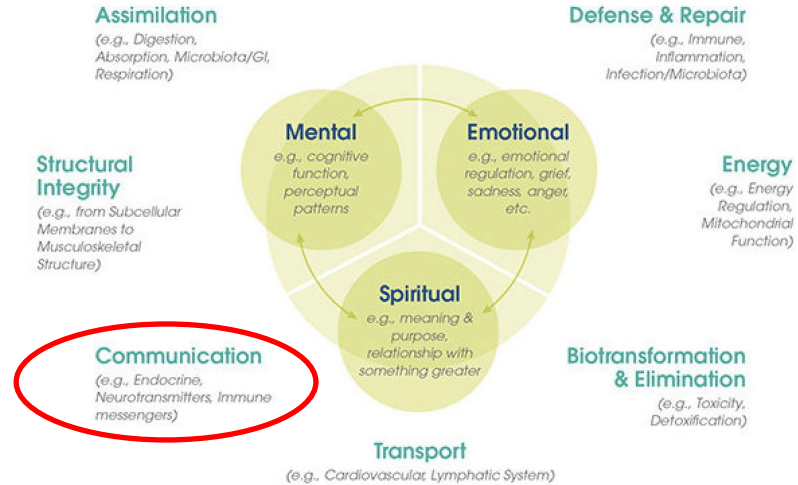
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Modifiable Personal Lifestyle Factors

Sleep & Relaxation

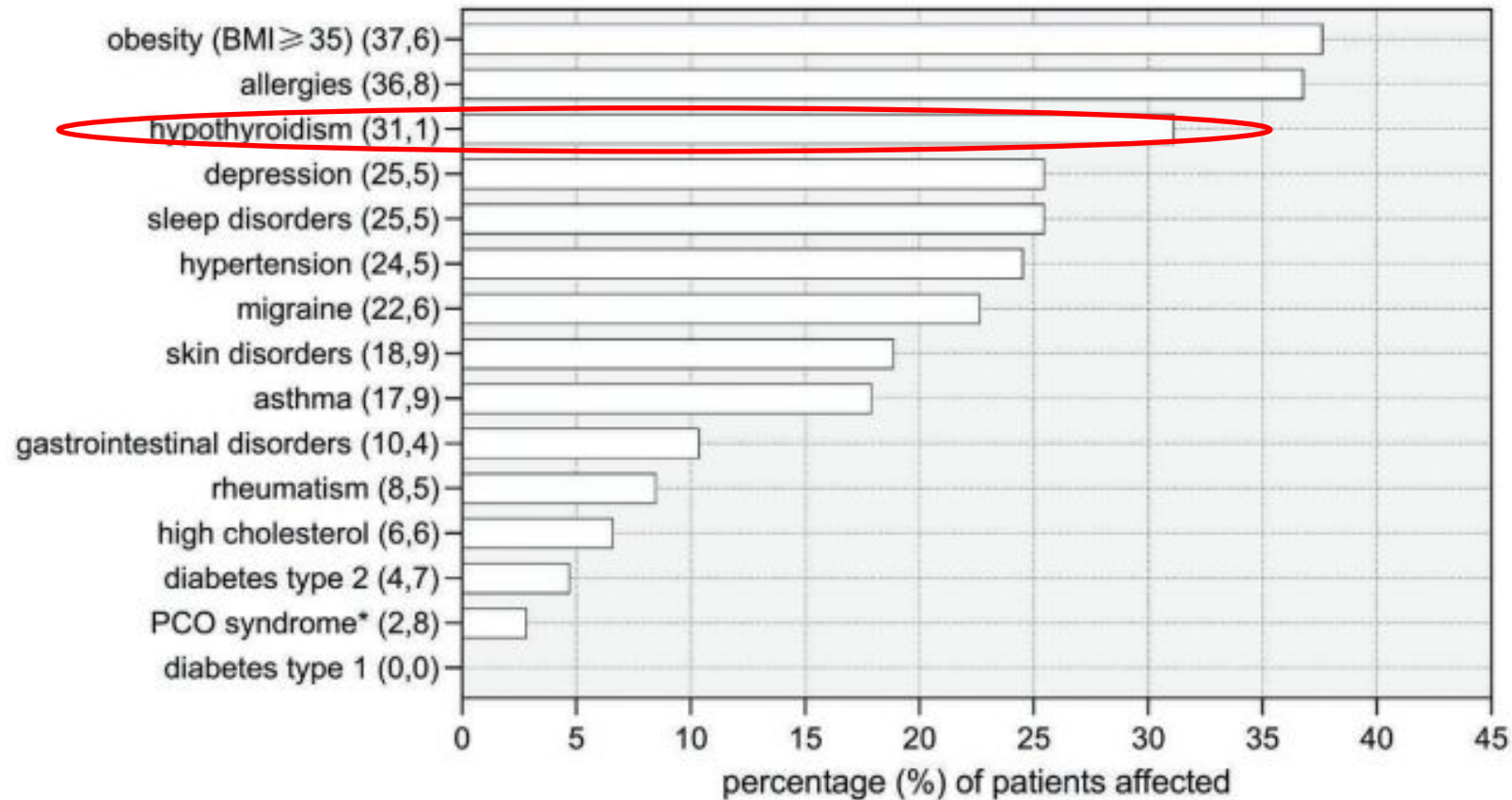
Exercise & Movement

Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____



Standard of care for lipedema in the United States

Karen L Herbst^{1,2,3} , Linda Anne Kahn^{2,4}, Emily Iker^{2,5},

Phlebology
2021, Vol. 36(10) 779–796
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2.11. Thyroid function should be assessed in people with lipedema. (⊕A)

Hypothyroidism was found in 27%–36% of women with lipedema.^{4,67,70}

Breaking the circle-effectiveness of liposuction in lipedema

Tobias Seefeldt^{1,2,3,*} | Marie-Luise Aitzetmüller-Klietz^{1,2,3,*} | Maximilian Kückelhaus^{1,2,3} |

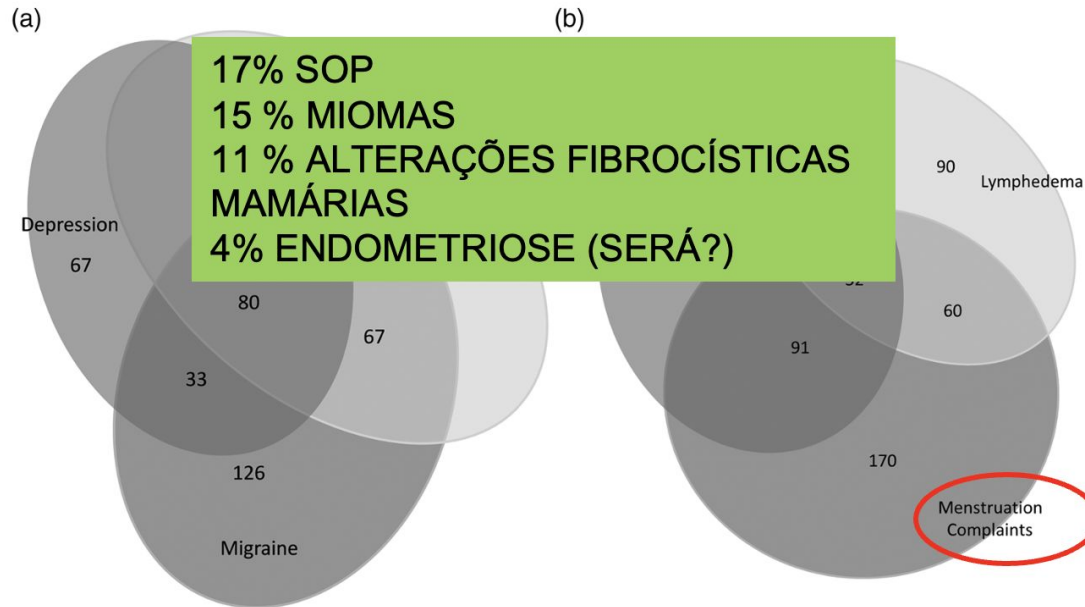
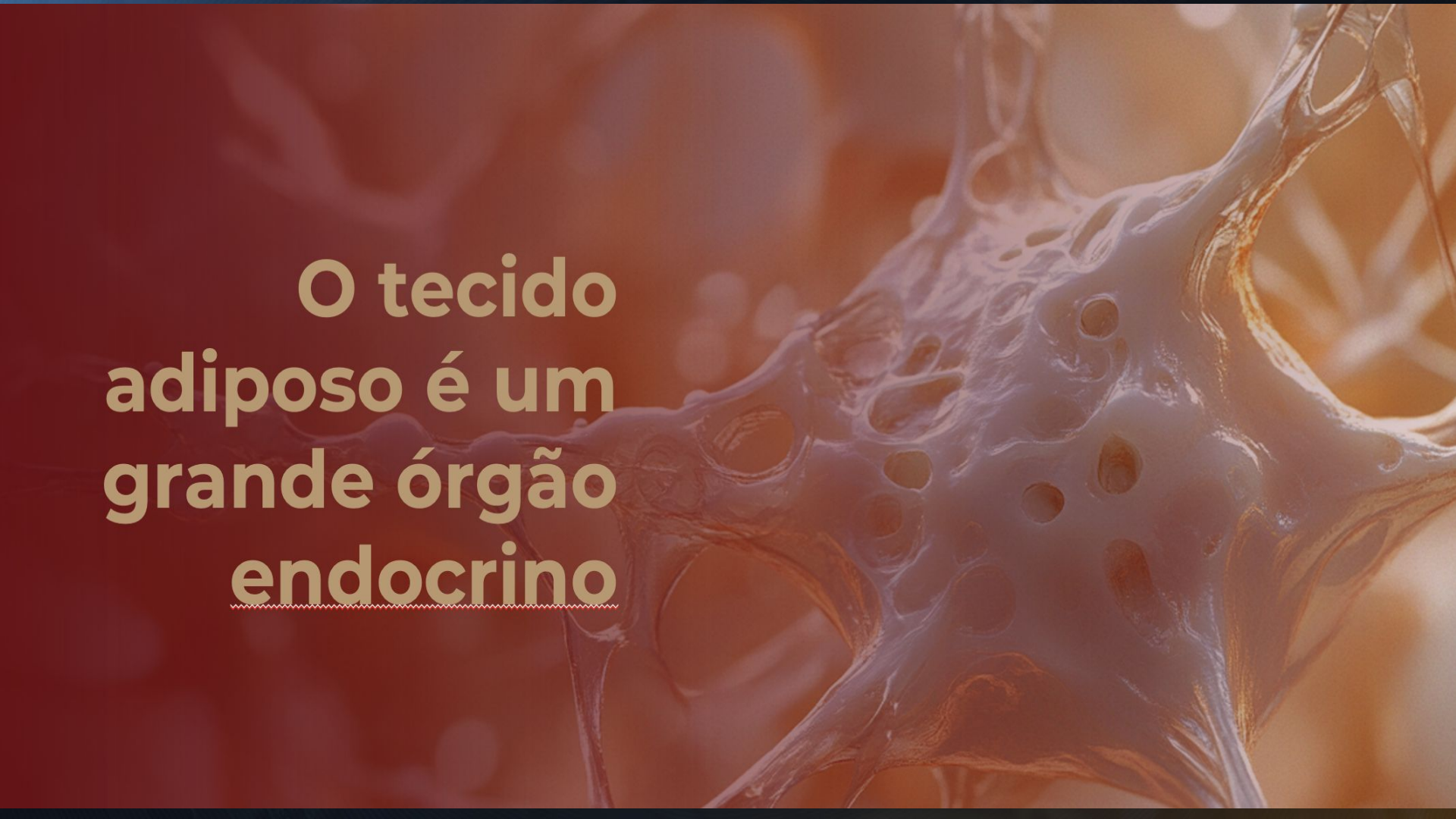


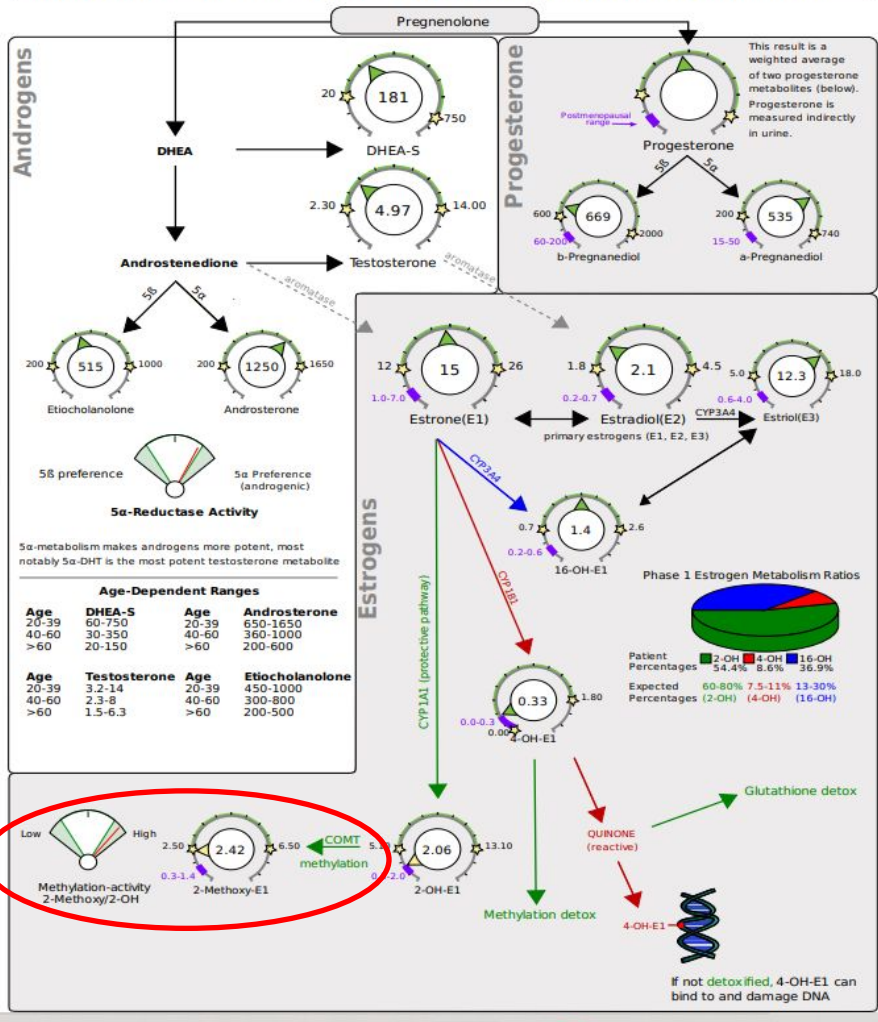
FIGURE 4 (a, b) The Venn diagram shows the most common comorbidities. Migraine, insomnia, and depression were highly correlated.

The image shows a microscopic view of adipose tissue, characterized by large, clear, lipid-filled cells. The text is overlaid on the left side of the image. The word 'endocrino' is underlined with a red dashed line.

**O tecido
adiposo é um
grande órgão
endocrino**

**Tudo que envolve
distribuição de gordura
corporal em mulheres,
envolve seus hormônios**





If not detoxified, 4-OH-E1 can bind to and damage DNA

The Association Between Lipedema and Attention-Deficit/Hyperactivity Disorder

Alexandre C. Amato ¹, Juliana L. Amato ¹, Daniel A. Benitti ²

1. Department of Vascular Surgery, Amato - Instituto de Medicina Avançada, São Paulo, BRA 2. Department of Vascular and Endovascular Surgery, Medical Valens Center, São Paulo, BRA

Corresponding author: Alexandre C. Amato, alexandre@amato.com.br

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Review ended 02/27/2023

Published 02/28/2023

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Mulheres com lipedema apresentam risco 40% maior de serem diagnosticadas com TDAH

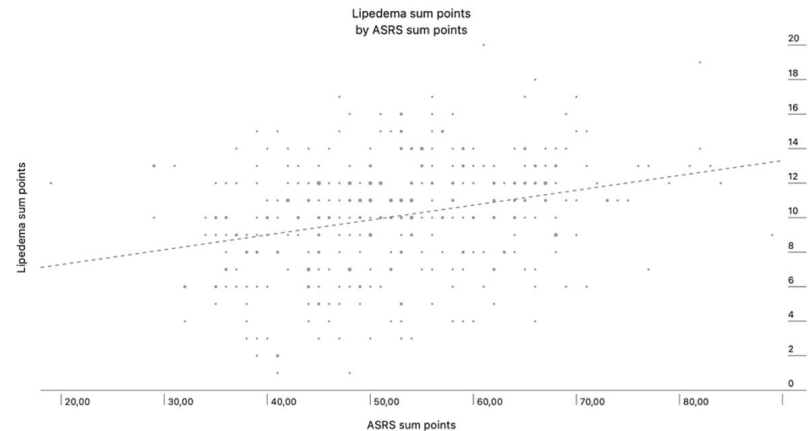


FIGURE 1: Scatterplot visualizing the relationship between lipedema sum points and ASRS sum points.

Pearson correlation, $p < 0.001$, positive correlation

FUNCTIONAL MEDICINE MATRIX

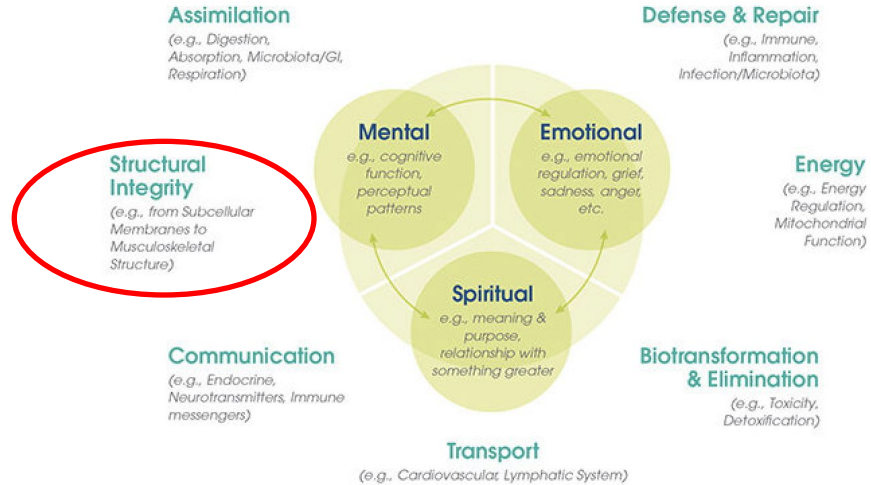
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Modifiable Personal Lifestyle Factors

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Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____

GutCHECK Plus



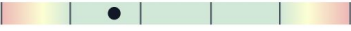



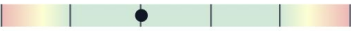
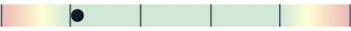

MACROSCOPIC EXAMINATION AND OCCULT BLOOD

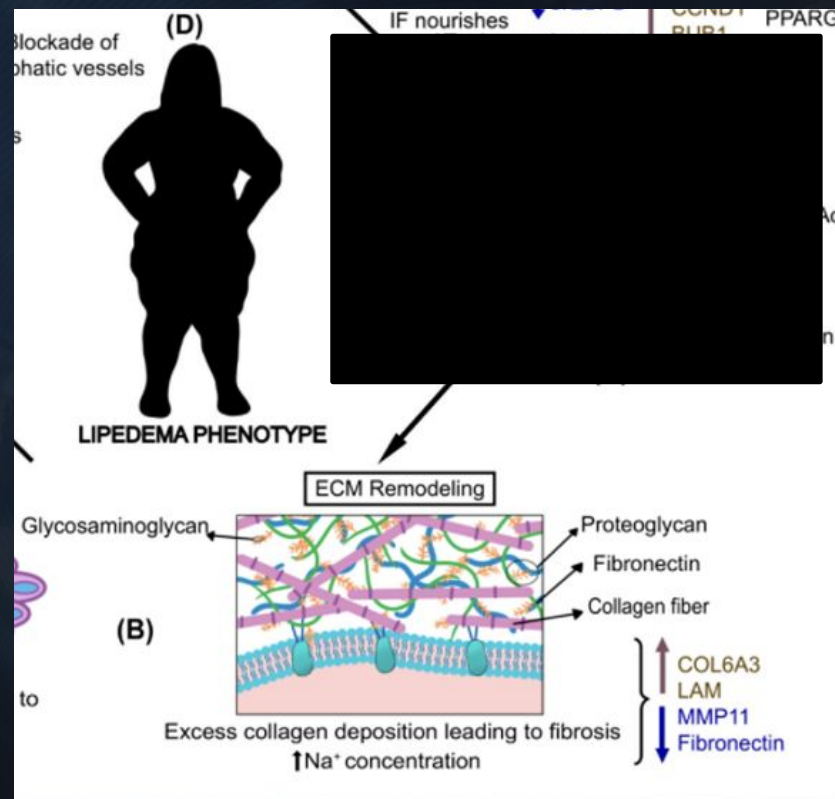
SERVICE	RESULT
Stool Colour	Brown
Stool Form	Semiformed

MACROSCOPIC EXAMINATION AND OCCULT BLOOD

SERVICE	INTERPRETATION
Mucous	Absent
Occult Blood	Negative

GIT FUNCTIONAL MARKERS

SERVICE	RESULT	H/L		REF - RANGE	UNITS
Pancreatic Elastase 1	> 800			(>200)	ug/g
b-Glucuronidase	1854			(368-6266)	U/g
Calprotectin	7.7			(<50.0)	ug/g
Secretory IgA	< 50	L		(510-2040)	ng/mL
Transglutaminase IgA	1.0			(0.0-100.0)	ug/g
Zonulin	39			(0-107)	ng/mL
Steatocrit	< 1.0			(0.0-10.0)	%
pH	7.0			(6.3-7.7)	



Muscle strength and functional exercise capacity in patients with lipoedema and obesity: a comparative study

José van Esch-Smeenge, Robert J Damstra, Ad A Hendrickx

(494.1 ± 116.0 metres) than the group with obesity (523.9 ± 62.9 metres; $p=0.296$). **Conclusions:** Patients with lipoedema exhibit muscle weakness in the quadriceps. This finding provides a potential new criterion for differentiating lipoedema from obesity. We recommend adding measuring of muscle strength and physical endurance to create an extra diagnostic parameter when assessing for lipoedema. **ClinicalTrials.gov Identifier:** NCT01759004

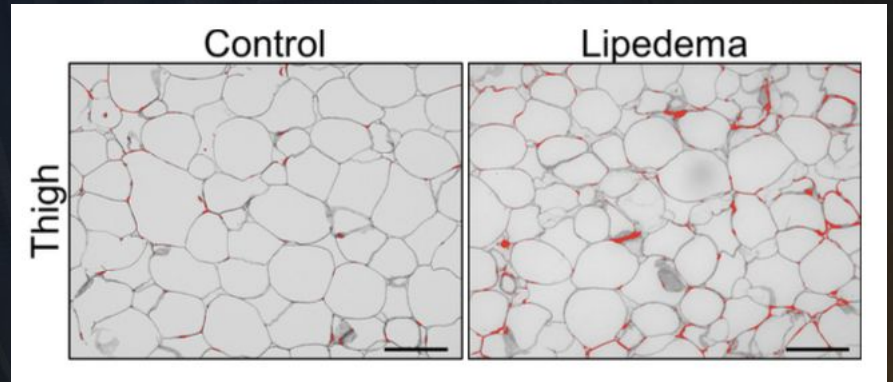
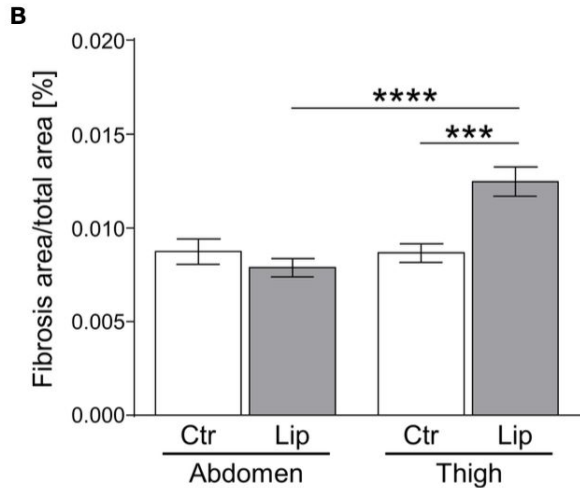


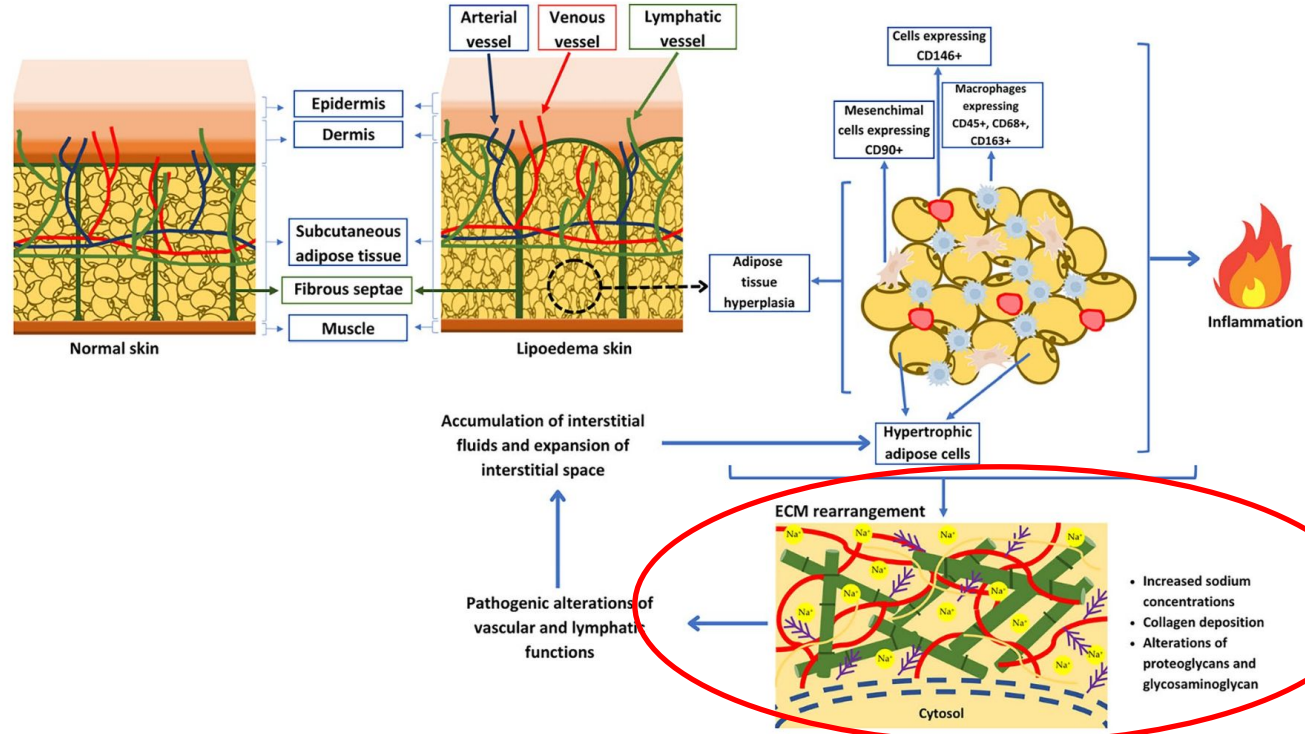
OPEN ACCESS

EDITED BY
Zhihao Jia,
Purdue University, United States

REVIEWED BY
Janette Furuzawa-Carballeda,

Lipedema stage affects adipocyte hypertrophy, subcutaneous adipose tissue inflammation and interstitial fibrosis







LIPDEMA CARE & TREATMENTS OPTIONS

Note: Start slowly and introduce one new treatment at a time.

♥ INCREASE MOBILITY/
MINIMIZE FATIGUE

⚡ MANAGE PAIN

MANAGE INFLAMMATION



- Ways of Eating ♥⚡
 - Nutrient-Dense Foods
 - RAD ♥⚡
 - Mediterranean Diet ♥⚡
 - Remove Inflammatory Foods ♥⚡

- Soft Tissue Mobilization
- Massage
- Tapping/Hammering
- Deep Tissue Work
 - QuadriVas

REDUCE FIBROSIS



- Red Light Therapy
- US Cavitation
- Shock Wave ⚡

- Myofascial Release ♥⚡
- Functional Manual Therapy® ♥⚡
- Acupuncture ⚡
- Dry Needling ⚡
- Cupping
- Gua Sha

DECREASE ADIPOSE TISSUE



- Reduce Non-Lipedema Body Fat
 - Ways of Eating
 - Keto
 - Low Carb, High Fat
 - GLP-1 Agonist Meds
 - Bariatric Surgery
- Investigate Liposuction

- Gut Healing
- Supplements
- Medications

- Aquatic Exercise ♥⚡
- Walking ♥⚡/Hiking ♥⚡
- Lymphatic Yoga ♥⚡
- Rebounding ♥
- Cycling ♥
- Pilates ♥
- Weight Training ♥
- Elliptical ♥
- Tai Chi ♥⚡

- Compression ♥⚡
- MLD ⚡
- Bandaging/Wrapping
- Dry Brushing
- Rebounding
- Compression Pump ♥⚡
- Kinesiotaping
- Vibration plates

IMPROVE LYMPHATIC FLOW



- Build Muscle Strength ♥

- Stretching ♥⚡
- Walking Outside ♥⚡
- Dancing ♥⚡
- Deep Breathing ♥
- Fitness Groups

PROMOTE OVERALL HEALTH



- Pain Management ⚡
- Skin Care
- Vein Health
- Proper Hydration

- Managing Stress ♥
- Restorative Sleep ♥
- Energy Conservation

- Online Patient Support Groups
- Self-Advocacy
 - LF Patient Self-Advocacy Guide
 - Patient Bill of Rights
 - Self-Care Plan
- Counseling
- Patient Friends
- Community Advocacy
- FDRS Conference

PRIORITIZE EMOTIONAL/ MENTAL HEALTH



FUNCTIONAL MEDICINE MATRIX

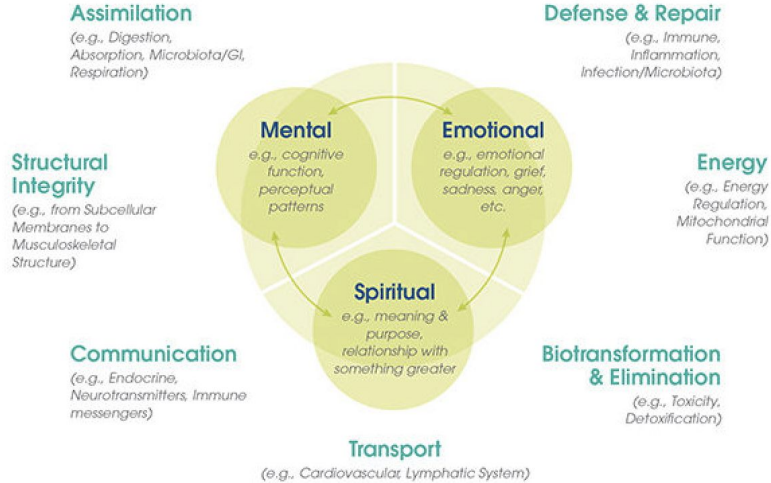
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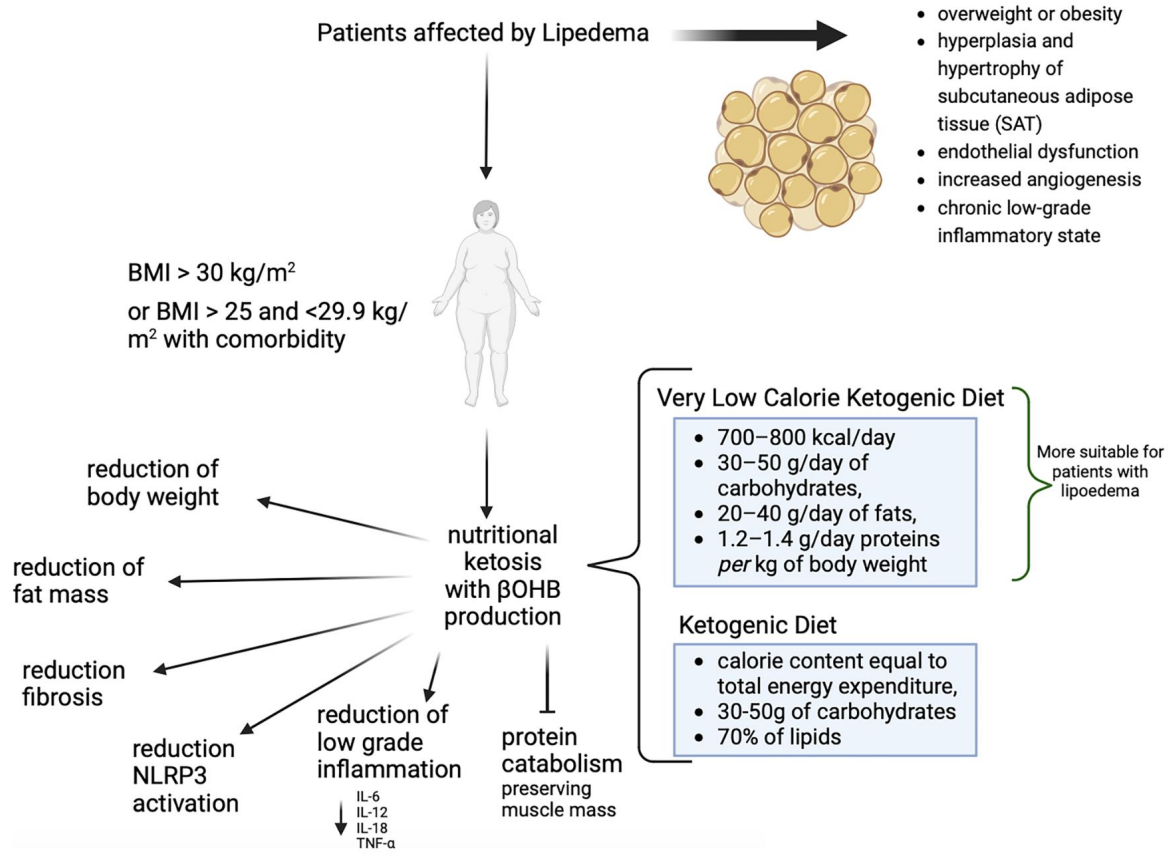
Exercise & Movement

Nutrition

Stress

Relationships

Name: _____ Date: _____ CC: _____



Effect of a low-carbohydrate diet on pain and quality of life in female patients with lipedema: a randomized controlled trial

Julianne Lundanes^{1,2} | Frida Sandnes^{3,4} | Kari Hanne Gjeilo^{5,6} |
Patrik Hansson^{3,7} | Sissel Salater⁸ | Catia Martins^{1,8,9} | Siren Nymo^{1,2,8}

¹Department of Clinical and Molecular Medicine, Faculty of Medicine and Health Sciences, Norwegian University of Science and Technology, Trondheim, Norway

Comparação de dieta controle x dieta low-carb (1200 kcal para ambas)

Results: A total of 70 female patients (age, mean [SD], 47 [11] years; BMI 37 [5] kg/m²) were included. The LCD group had greater weight loss (−2.8 kg; 95% CI: −4.1 to −1.0; $p < 0.001$) and larger reduction in pain now (−1.1; 95% CI: −1.9 to −0.3; $p = 0.009$) compared with the control group. No association was found between changes in pain now and weight loss. Both groups experienced improvements in several QoL dimensions.



Therapeutic Applications of Ketogenic Diets in Lipedema: A Narrative Review of Current Evidence

Nevin Sanlier¹ · Serra Baltacı¹

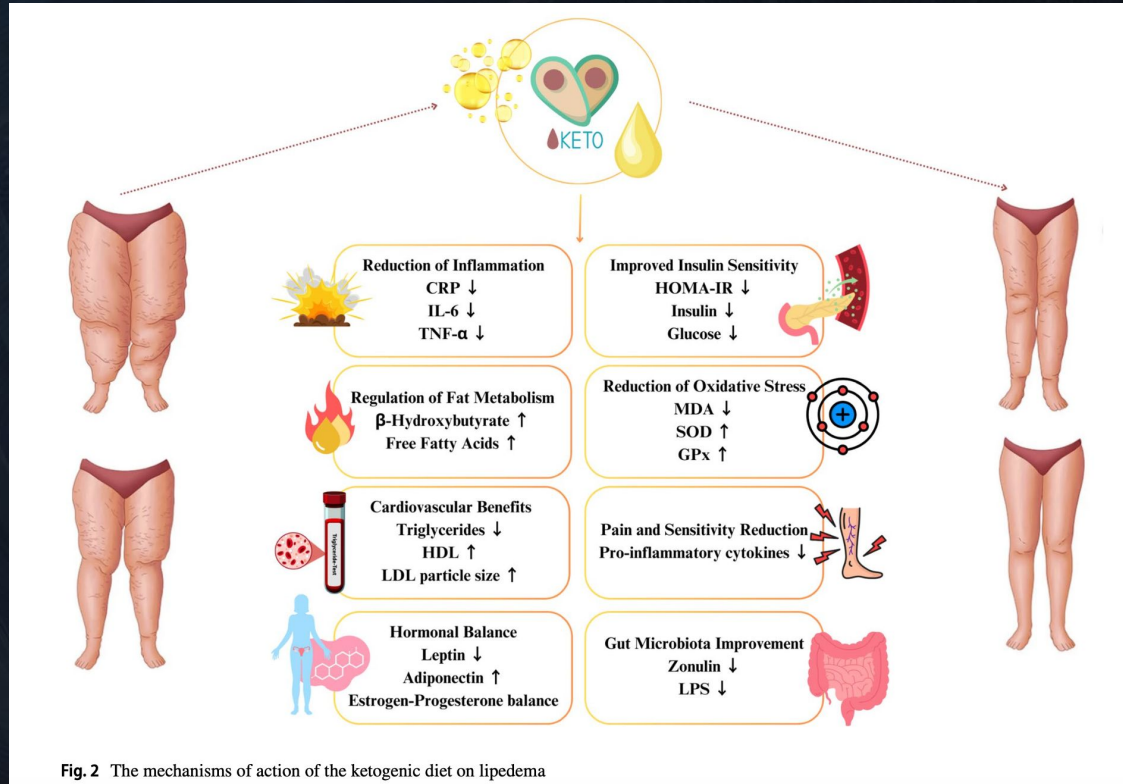


Fig. 2 The mechanisms of action of the ketogenic diet on lipedema



Medical Symptoms Questionnaire (MSQ)

Patient Name _____ Date _____

Rate each of the following symptoms based upon your typical health profile for the past 14 days.

Point Scale 0 – *Never or almost never* have the symptom 3 – *Frequently* have it, effect is *not severe*
1 – *Occasionally* have it, effect is *not severe* 4 – *Frequently* have it, effect is *severe*
2 – *Occasionally* have it, effect is *severe*

HEAD	<input type="checkbox"/> Headaches <input type="checkbox"/> Faintness <input type="checkbox"/> Dizziness <input type="checkbox"/> Insomnia	Total _____
EYES	<input type="checkbox"/> Watery or itchy eyes <input type="checkbox"/> Swollen, reddened or sticky eyelids <input type="checkbox"/> Bags or dark circles under eyes <input type="checkbox"/> Blurred or tunnel vision <i>(Does not include near or far-sightedness)</i>	Total _____
EARS	<input type="checkbox"/> Itchy ears <input type="checkbox"/> Earaches, ear infections <input type="checkbox"/> Drainage from ear <input type="checkbox"/> Ringing in ears, hearing loss	Total _____
NOSE	<input type="checkbox"/> Stuffy nose <input type="checkbox"/> Sinus problems <input type="checkbox"/> Hay fever <input type="checkbox"/> Sneezing attacks <input type="checkbox"/> Excessive mucus formation	Total _____
MOUTH/THROAT	<input type="checkbox"/> Chronic coughing <input type="checkbox"/> Gagging, frequent need to clear throat <input type="checkbox"/> Sore throat, hoarseness, loss of voice <input type="checkbox"/> Swollen or discolored tongue, gums, lips <input type="checkbox"/> Canker sores	Total _____
SKIN	<input type="checkbox"/> Acne <input type="checkbox"/> Hives, rashes, dry skin <input type="checkbox"/> Hair loss <input type="checkbox"/> Flushing, hot flashes <input type="checkbox"/> Excessive sweating	Total _____
HEART	<input type="checkbox"/> Irregular or skipped heartbeat <input type="checkbox"/> Rapid or pounding heartbeat <input type="checkbox"/> Chest pain	Total _____

MEDICAL SYMPTOMS QUESTIONNAIRE (MSQ)

LUNGS	<input type="checkbox"/> Chest congestion <input type="checkbox"/> Asthma, bronchitis <input type="checkbox"/> Shortness of breath <input type="checkbox"/> Difficulty breathing	Total _____
DIGESTIVE TRACT	<input type="checkbox"/> Nausea, vomiting <input type="checkbox"/> Diarrhea <input type="checkbox"/> Constipation <input type="checkbox"/> Bloating feeling <input type="checkbox"/> Belching, passing gas <input type="checkbox"/> Heartburn <input type="checkbox"/> Intestinal/stomach pain	Total _____
JOINTS/MUSCLE	<input type="checkbox"/> Pain or aches in joints <input type="checkbox"/> Arthritis <input type="checkbox"/> Stiffness or limitation of movement <input type="checkbox"/> Pain or aches in muscles <input type="checkbox"/> Feeling of weakness or tiredness	Total _____
WEIGHT	<input type="checkbox"/> Binge eating/drinking <input type="checkbox"/> Craving certain foods <input type="checkbox"/> Excessive weight <input type="checkbox"/> Compulsive eating <input type="checkbox"/> Water retention <input type="checkbox"/> Underweight	Total _____
ENERGY/ACTIVITY	<input type="checkbox"/> Fatigue, sluggishness <input type="checkbox"/> Apathy, lethargy <input type="checkbox"/> Hyperactivity <input type="checkbox"/> Restlessness	Total _____
MIND	<input type="checkbox"/> Poor memory <input type="checkbox"/> Confusion, poor comprehension <input type="checkbox"/> Poor concentration <input type="checkbox"/> Poor physical coordination <input type="checkbox"/> Difficulty in making decisions <input type="checkbox"/> Stuttering or stammering <input type="checkbox"/> Slurred speech <input type="checkbox"/> Learning disabilities	Total _____
EMOTIONS	<input type="checkbox"/> Mood swings <input type="checkbox"/> Anxiety, fear, nervousness <input type="checkbox"/> Anger, irritability, aggressiveness <input type="checkbox"/> Depression	Total _____
OTHER	<input type="checkbox"/> Frequent illness <input type="checkbox"/> Frequent or urgent urination <input type="checkbox"/> Genital itch or discharge	Total _____

Grand Total _____

* REDUÇÃO DO TECIDO ADIPOSEO

* LINFAGOGOS : HESPERIDINA, DIOSIMA

- BERBERINA 300-500 MG ATÉ 3 X AO DIA

- MIOINOSITOL 2 A 4G AO DIA

- ALFA LIPÓICO 300 MG AO DIA

- SELENIO, ZINCO, MAGNÉSIO

- FARMACOS : MEFORMINA, INIBIDORES SGLT2,
ANALOGOS GLP1 E DUPLO AGONISTAS

REDUZIR HISTAMINA : QUERCETIA, CROMOGLICATO DE
SÓDIO

INTESTINO : CALCIO GLUCARATO, BUTIRATO

ANTI-INFLAMATÓRIOS

CURCUMA

OMEGA 3

EGCG 800 MG AO DIA

BROMELINA

RESVERATROL

RESVERATROL + METFORMINA : FIBROSE

VITAMINA D : ESSENCIAL !

Como
suplementar
no Lipedema?

OBRIGADA



CONTATOS:
drajubicca@gmail.com

