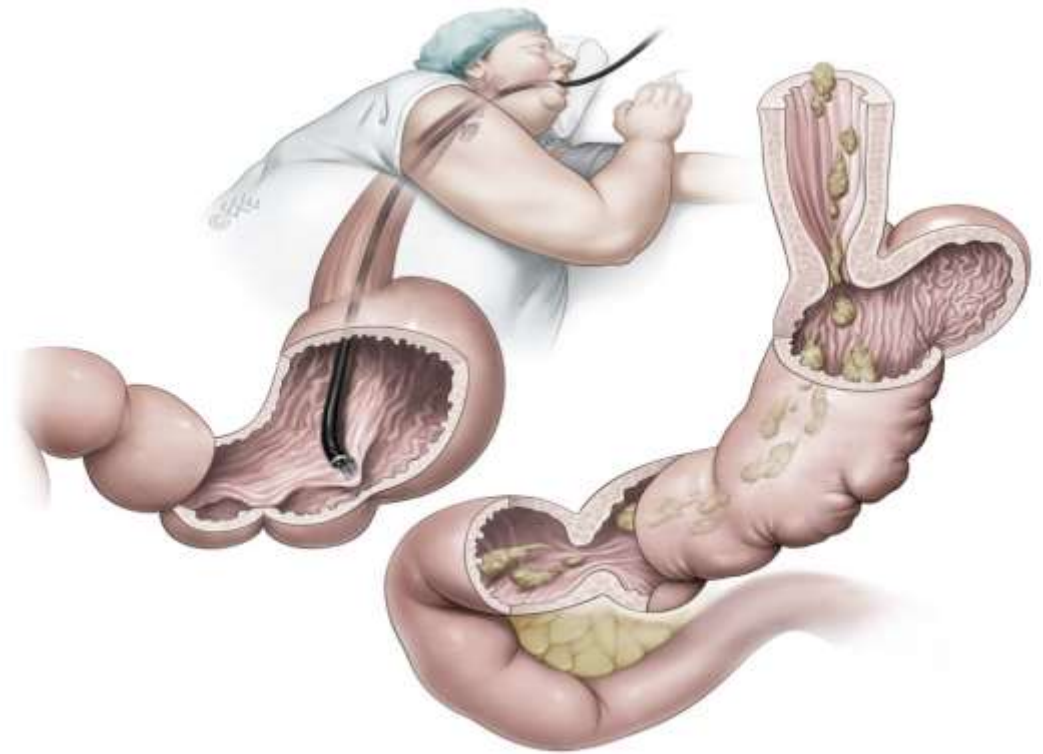


# ENDOSCOPIC SLEEVE GASTROPLASTY STATE OF THE ART – UPDATE

## ESG: IFSO Guidelines

Christine Stier  
Germany



PICTURE. © DR. LEVENT EFE. COURTESY OF IFSO

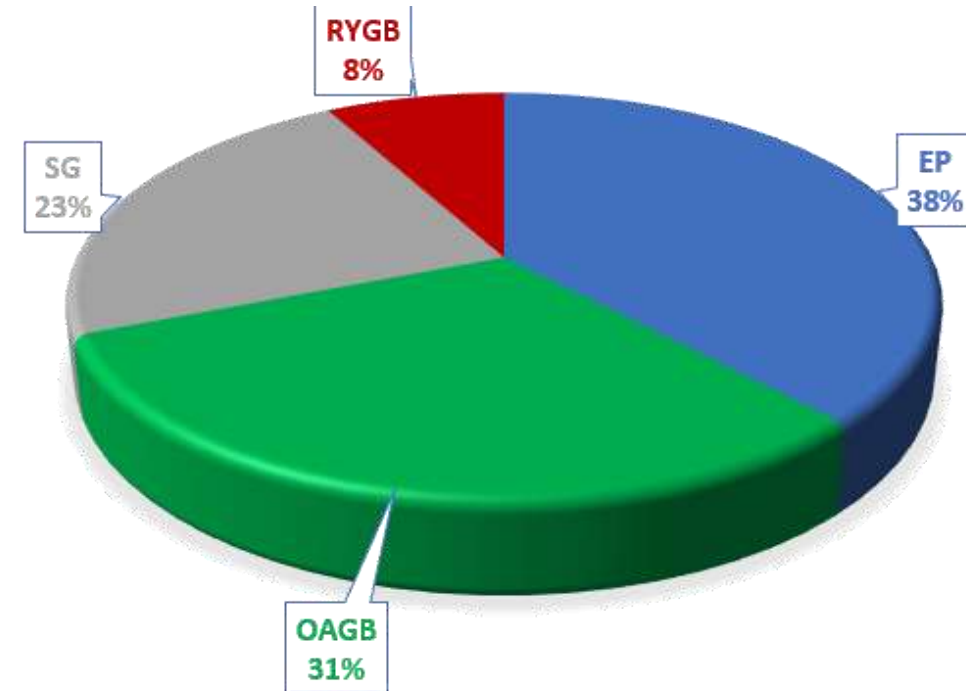
In accordance with 'EACCME criteria', I REPORT THE FOLLOWING COIs

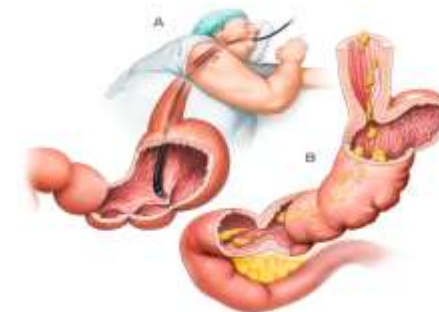
### ADVISORY BOARDs & CONSULTANCIES

- NovoNordisk, Danmark
  - Apollo EndoSurgery, TEXAS
  - Johnson & Johnson Europe & USA
  - Lohmann & Rauscher Germany
  - Cranax Medical France
  - NitiNotes Israel
- **PERTICIPANT IFSO's CONSENSUS CONFERENCE HAMBURG 3/23**

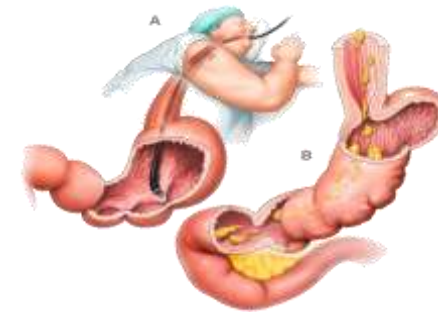
There was no funding or mutual benefit regarding this presentation

### CASE MIX DISCLOSURE. PROCEDURES >> 5000





## ESG – BACKGROUND TO THE REASON FOR APPROVAL



**ESG was launched in 2013**

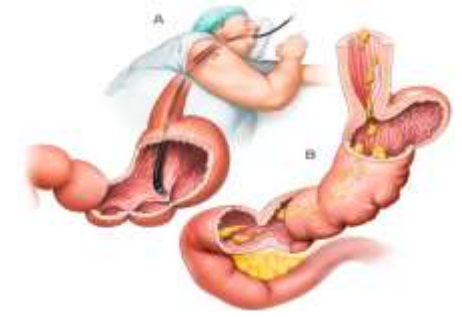
### The first publication detailed

- Gastric remodelling form
- Physiology
- Nomenclature. **Endoscopic Sleeve Gastroplasty => ESG**

as an **endoscopic suturing techniques for weight loss (EMBT)**.

Abu Dayyeh et al. Endoscopic sleeve gastroplasty: a potential endoscopic alternative to surgical sleeve gastrectomy for treatment of obesity.

Gastrointest Endosc. 2013;78:530-5.



## ESG gained GLOBAL CLINICAL ADOPTION

In GERMANY, a there is even private company has patented gastroplasty as the

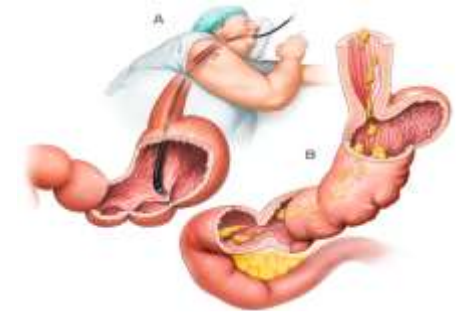
- 'Weight Doctors Sleeve'
- at a similar price to the US
- They are very well booked





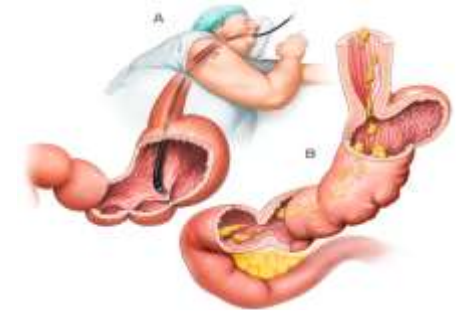
## ESG is ACCEPTED

- Patients who are unwilling to undergo surgery
- Patients who are suffering from obesity and who are not candidates for surgery
- Patients with class 1 and 2 obesity



## ESG is POPULAR

As of **December 2022** => more than **200 international peer-reviewed medical articles** had been published on the procedure



**ESG provides 1b EVIDENCE**

**December 2022 =>**

**THE LANCET publication of a large US multi-centre randomized trial with mid-term follow-up: the MERIT Trial**

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### **Endoscopic sleeve gastroplasty for treatment of class 1 and 2 obesity (MERIT): a prospective, multicentre, randomised trial**

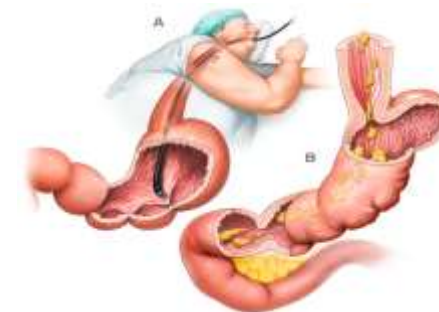
*Barham K Abu Dayyeh, Fateh Bazerbachi, Eric J Vargas, Reem Z Sharaiha, Christopher C Thompson, Bradley C Thaemert, Andre F Teixeira, Christopher G Chapman, Vivek Kumbhari, Michael B Ujiki, Jeanette Ahrens, Courtney Day, the MERIT Study Group, Manoel Galvao Neto, Natan Zundel, Erik B Wilson*

#### **Summary**

**Background** Endoscopic sleeve gastroplasty (ESG) is an endolumenal, organ-sparing therapy for obesity, with wide global adoption. We aimed to explore the efficacy and safety of ESG with lifestyle modifications compared with lifestyle modifications alone.

Abu Dayyeh et al.. Endoscopic sleeve gastroplasty for treatment of class 1 and 2 obesity (MERIT): a prospective, multicentre, randomised trial. Lancet. 2022 Aug 6;400(10350):441-451.





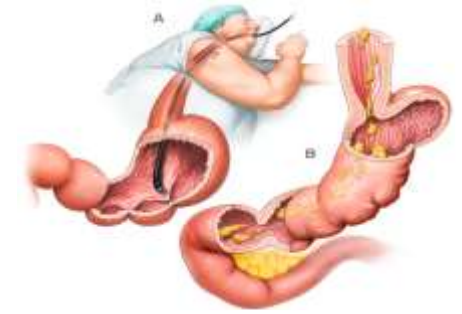
## THE IFSO's CONSENSUS CONFERENCE ON DEFINITION AND CLINICAL PRACTICE GUIDELINES, March 2023 in Hamburg





**IFSO CONSENSUS CONFERENCE 2023**

**Hamburg, March 9-10, 2023**



**CONSENSUS CONFERENCE**

**9/10 March in Hamburg**

**“The Algorithm for the Multimodal Management of Obesity”  
BASED ON DEFINITION AND CLINICAL PRACTICE GUIDELINES**

**FACULTY**

**Bariatric Surgeons**

- Aayeed Al Qahtani, Saudi Arabia
- Ali Aminian, USA
- Luigi Angrisani, Italy
- Ahmad Bashir, Jordan
- Estuardo Behrens, Guatemala
- Jean Marc Chevallier, France
- Ricardo Cohen, WOF, Brazil
- Pierre Garneau, Canada
- Khaled Gawdat, Egypt
- Ashraf Haddad, Jordan
- Jacques Himpens, Belgium
- Thomas Inge, USA
- Lillian Kow, Australia
- Ken Loi, Australia
- Juan Antonio Lopez Corvala, Mexico
- Abdelrahman Nimeri, USA
- Francois Pattou, France
- Luis Poggi, Peru
- Jaime Ponce, USA
- Gerhard Prager, Austria
- Almino Ramos, Brazil
- Francesco Rubino, UK
- Paulina Salminen, Finland
- Andres Sanchez Pernaute, Spain
- Scott Shikora, USA
- Cunchuan Wang, China
- Natan Zundel, USA

**Physicians**

- Nasreen Al Faris, Saudi Arabia
- Caroline Apovian, USA
- Rachel Batterham, UK
- Dror Dicker, Israel
- Claudia Fox, USA
- Lee Kaplan, USA
- Nabijša Lalic, IDF, Serbia
- Guilherme Macedo, WGO, Portugal
- Alex Miras, UK
- Tarissa Petry, Brazil
- Arya Sharma, Germany
- Josep Vidal, Spain

**Endoscopists**

- Barham Abu Dayyeh, USA
- Mohit Bhandari, India
- Christine Stier, Germany
- Chris Thompson, USA

**Integrated Health Professionals**

- Barbara Andersen, Austria
- Dale Bond, USA
- Silvia Leite Faria, Brazil
- Violeta Moize, Spain
- David Sarwer, USA

**Delphi Expert**

- Kevin White, USA

**4 / 43** endoscopists only  
**11 / 28** surgeons perform EBMT procedures

**13.30 – 14.30 Endoscopy for the Treatment of Obesity**

**Chairs: Barham Abu Dayyeh, Christine Stier, Chris Thompson, Mohit Bhandari, CC Wang, Luis Poggi**

**Objectives of the session – Reasons why we are aiming to this**

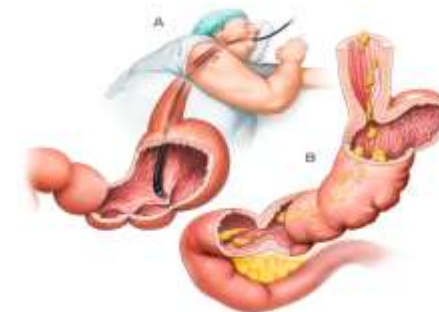
13.30 – 13.40 RCT for class I and II obesity for endoscopic sleeve gastrectomy, **Barham Abu Dayyeh**

13.40 – 13.50 Endoscopic treatments in adolescents, **Christine Stier**

13.50 – 14.00 Endoscopic treatments for metabolically challenged patients, **Christopher Thompson**

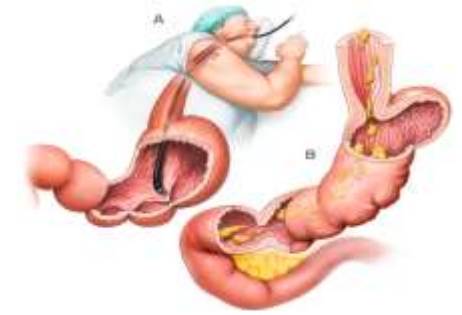


**NAPOLI  
2023**



## THE IFSO'S CONSENSUS CONFERENCE – RESULTS OF THE DELPHI PROCESS REGARDING ESG



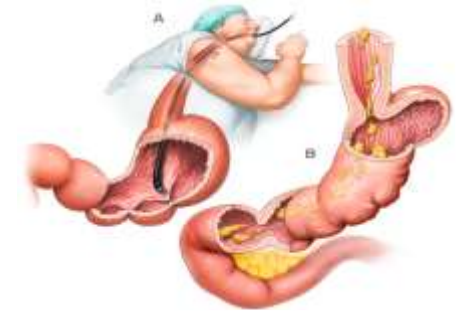


## THE IFSO's CONSENSUS CONFERENCE – INDICATION RANGE WITH RESPECT TO OBESITY CLASS



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**RESULTS REGARDING ESG**

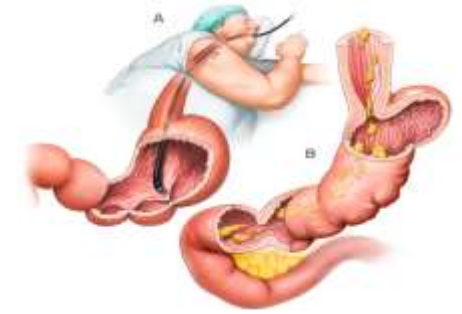
“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
ESG combined with lifestyle intervention is preferable to lifestyle interventions alone, for the management of adults with class I obesity.	38	1	Agree	78.9%	Yes



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**RESULTS REGARDING ESG**

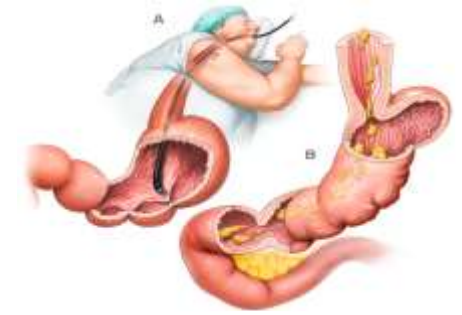
“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
ESG combined with lifestyle intervention is preferable to lifestyle interventions alone, for the management of adults with class II obesity.	39	1	Agree	89.7%	Yes



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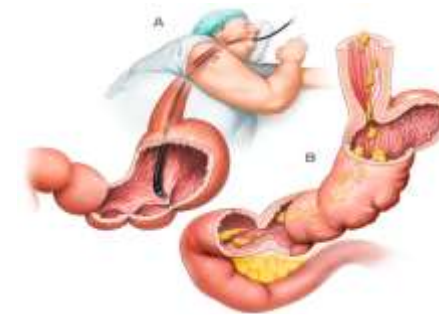
Hamburg, March 9-10, 2023



**RESULTS REGARDING ESG**

“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
ESG combined with lifestyle intervention is an acceptable management option for adults with class III obesity who either do not qualify (given medical or psychological comorbidities) or do not wish to pursue MBS.	42	1	Agree	87.5%	Yes



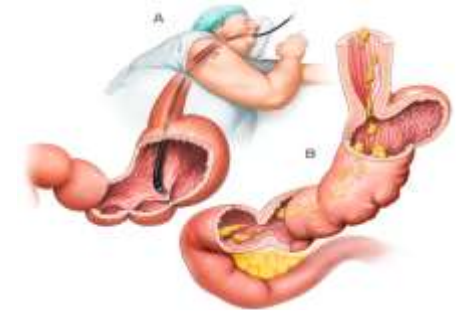
## THE IFSO's CONSENSUS CONFERENCE – CONSENTED DURABILITY





IFSO CONSENSUS CONFERENCE 2023

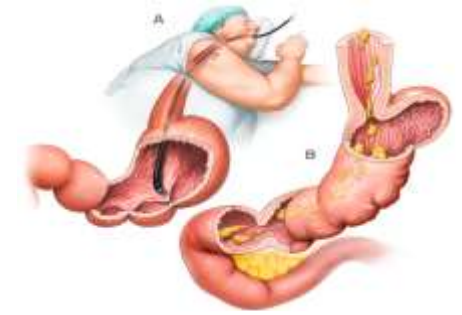
Hamburg, March 9-10, 2023



## RESULTS REGARDING ESG

“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
In individuals with class I obesity and comorbidities, ESG is effective at inducing sustained weight loss that remains at 12-24 months follow-up.	38	1	Agree	76.3%	Yes

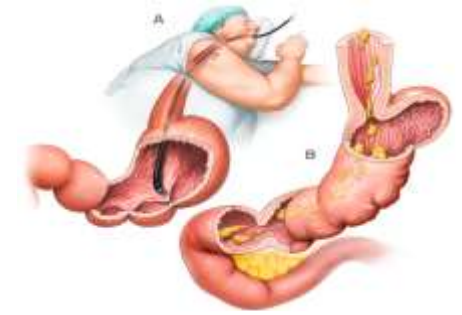


## THE IFSO's CONSENSUS CONFERENCE – COMPARED TO NON-INVASIVE THERAPIES



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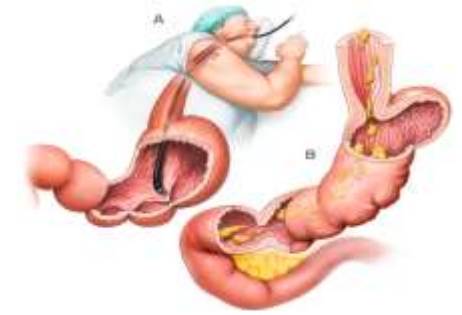
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**RESULTS REGARDING ESG**

“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
In individuals with class I obesity and comorbidities, ESG is superior to LIFESTYLE CHANGES/AOM/NEITHER/BOTH.	39	1	Lifestyle changes	74.4%	Yes

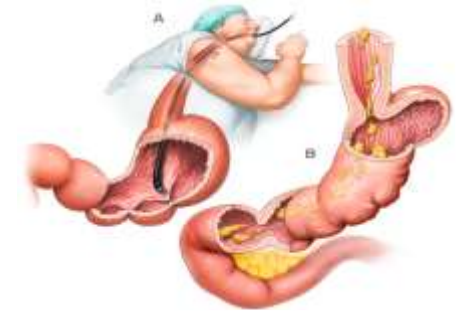


## THE IFSO's CONSENSUS CONFERENCE – INDICATION FOR APPLICATION IN ADOLESCENTS



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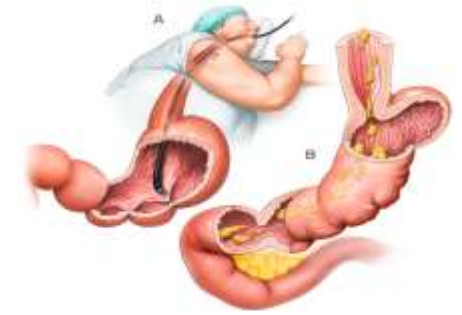
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## RESULTS REGARDING ESG

“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
ESG combined with lifestyle intervention is preferable to lifestyle interventions alone, for the management of adolescents with class II obesity.	40	1	Agree	72.5%	Yes

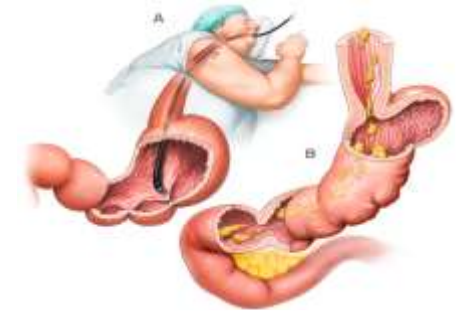


## THE IFSO's CONSENSUS CONFERENCE – RECOMMENDATION WHEN A PATIENT DOESN'T WANT AN INTERVENTION (CLASS 1- OBESITY)



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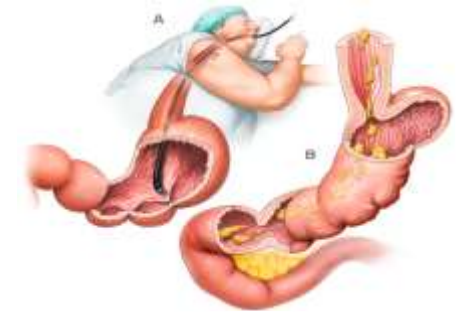
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## RESULTS REGARDING ESG

“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
In individuals with class I obesity and comorbidities, ESG is not suitable if an individual does not want surgical treatment.	39	1	Disagree	71.8%	Yes



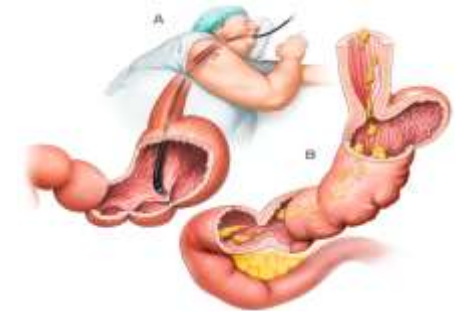
## THE IFSO's CONSENSUS CONFERENCE – NO CONSENSUS ON THE USE OF ESG IN ADOLESCENTS WITH CLASS 1 OBESITY





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## RESULTS REGARDING ESG

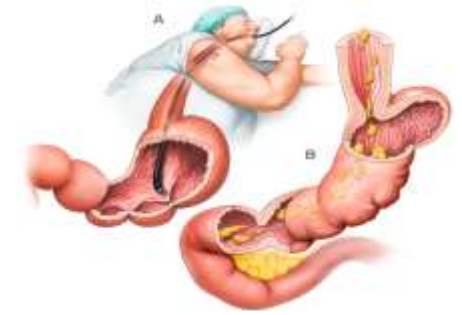
“The Algorithm for the Multimodal Management of Obesity”

STATEMENTS N=13	N	ROUND REQUIRED	MOST COMMON SELECTION	PERCENTAGE CONSENSUS	CONSENSUS ACHIEVED
ESG combined with lifestyle intervention is preferable to lifestyle interventions alone, for the management of adolescents with class I obesity.	41	2	Agree	56.1%	No



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**IFSO's CONSENSUS BOOK**

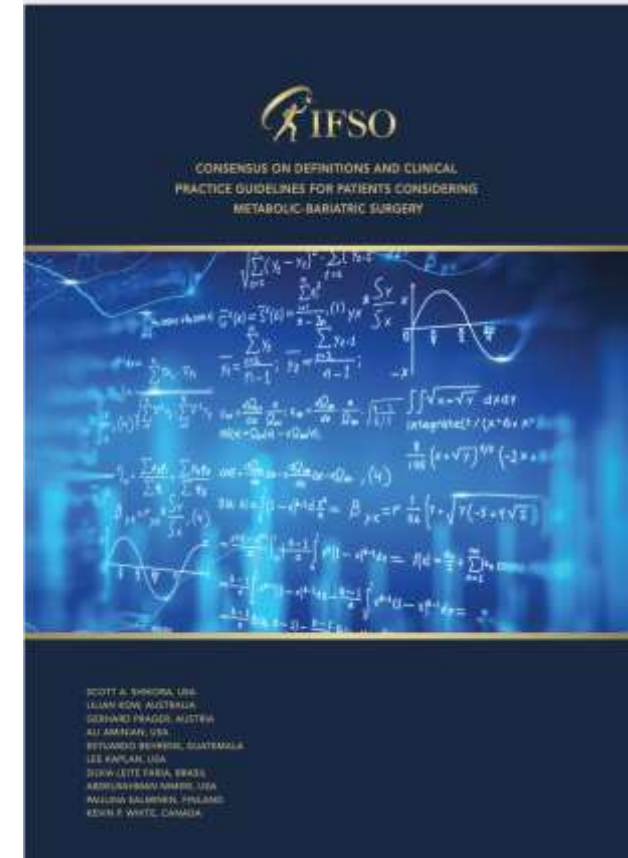
**“The Algorithm for the Multimodal Management of Obesity”**

**THE RESULTS OF**

**“THE ALGORITHM FOR THE MULTIMODAL TREATMENT OF OBESITY”**

based on **DEFINITION AND CLINICAL PRACTICE GUIDELINES**

**ARE SUMMERIZED IN THE IFSO CONSENSUS BOOK**



Kow L, O’Kane M, White KP, Macedo G, Shahaira R, Toouli J, et al. Methodology and results of a joint IFSO-WGO Delphi Survey of 94 intercontinental, interdisciplinary experts in obesity management. [publication pending]. 2023.



“The Algorithm for the Multimodal Management of Obesity”

Kow L, O’Kane M, White KP, Macedo G, Shahaira R, Toouli J, et al. Methodology and results of a joint IFSO-WGO Delphi Survey of 94 intercontinental, interdisciplinary experts in obesity management. [publication pending]. 2023.

## CONCLUSIONS AND TAKE HOME

IFSO EXPERTS CONSENTED ON THE INDICATION FOR ESG.

- OVER LIFESTYLE INTERVENTION IN PATIENTS WITH **OBESITY CLASS 1 AND 2**
- IN PATIENTS WITH **CLASS 3** OBESITY THAT ARE **NOT ELIGIBLE FOR SURGERY**
- OVER LIFESTYLE INTERVENTION IN **ADOLESCENT PATIENTS WITH OBESITY CLASS 2 (MILESTONE PROJECT)**



Kow L, O’Kane M, White KP, Macedo G, Shahaira R, Toouli J, et al. Methodology and results of a joint IFSO-WGO Delphi Survey of 94 intercontinental, interdisciplinary experts in obesity management. [publication pending]. 2023.



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## CONCLUSIONS AND TAKE HOME

THERE IS STILL **EVIDENCE TO BE CREATED** REGARDING

- DURABILITY OF THE PROCEDURE
- THE INDICATION OVER LIFE STYLE IN ADOLESCENT WITH CLASS 1 OBESITY (**MILESTONE PROJECT**)

CORRESPONDING CONSENSUS.

THE **JOINT-IFSO-WGO DELPHI STATEMENT IN OBESITY MANAGEMENT (2022)**





IFSO CONSENSUS CONFERENCE 2023

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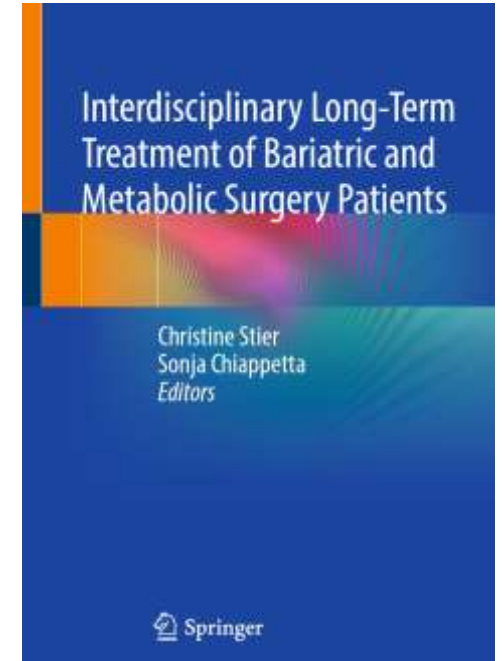
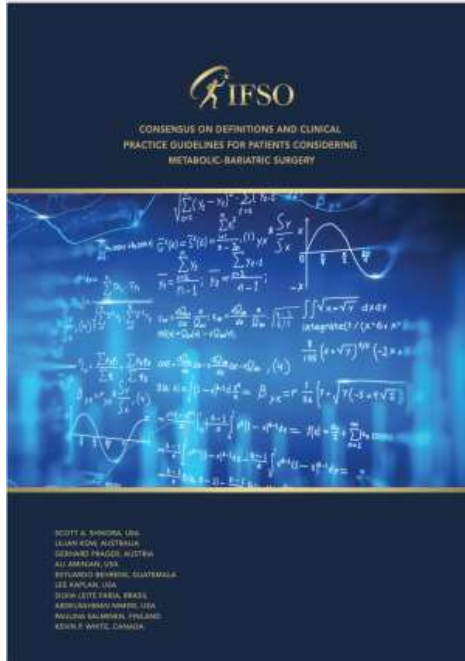
“The Algorithm for the Multimodal Management of Obesity”

WE **WORKED** A LOT

WE **CONSIDERED** A LOT

WE **DISCUSSED** A LOT

WE **ACHIEVED** A LOT



**WITH SPECIAL THANKS TO DR. MANUELA MAZZARELLA AND DR. KEVIN WHITE**

**THANK YOU FOR YOUR KIND INTEREST**

