



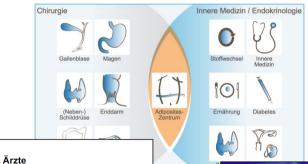


#### WENN ÜBERGEWICHT ZUR KRANKHEIT WIRD

Dr. med. Christopher Strey PhD MRCP Facharzt für Innere Medizin Facharzt für Endokrinologie/Diabetologie

09.11.2020

#### **KURZ ÜBER UNS**





#### Leitung

Adipositas – Zentrum

Diabetes - Zentrum

Endokrinologie Innere Medizin

Ernährungsberatung

Dr. med. Martin Thurnheer Leiter Chirurgie
Facharzt für Chirurgie, FMH
spez. Viszeralchirurgie

Viszerale und endokrine Chirurgie

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Facharzt für Chirurgie, FMH

Dr. med. Christopher Strey Leiter Innere Medizin Facharzt für Innere Medizin Facharzt für Endokrinologie / Diabetologie

Dr. med. Andreas Zerz Facharzt für Chirurgie spez. Viszeralchirurgie

Dipl. Ärztin Tatjana Himmler

Dr. med. Sabine Widerin

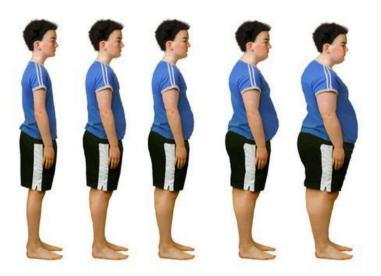
Dr. med. Andreas Mohl Facharzt für Psychiatrie und Psychotherapie, FMH Schwerpunkt Konsiliar- und Liaisonpsychiatrie







#### **SCHON BEMERKT ....**







#### WENN ÜBERGEWICHT ZUR KRANKHEIT WIRD

- Wie gross ist das Problem?
- Macht Übergewicht wirklich krank?
- Kann man durch Gewichtsabnahme gesünder werden?





#### **NÜTZLICH ZU WISSEN**

- **BMI** = Body Mass Index = Gewicht/Grösse = kg/m<sup>2</sup>
- BMI < 25 = kein Übergewicht
- BMI > 25 = Übergewicht
- BMI > 30 = Fettsucht = **Adipositas** = Obesity (engl.)
- Bariatrische Chirurgie = Chirurgie für Übergewicht





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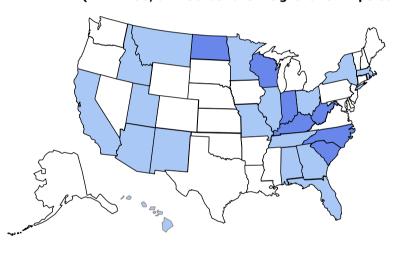
(\*BMI ≥30, or ~ 30 lbs. overweight for 5' 4" person)

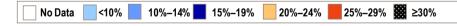


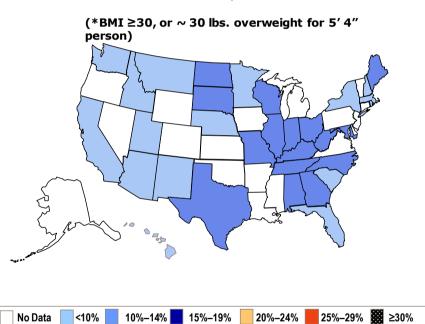
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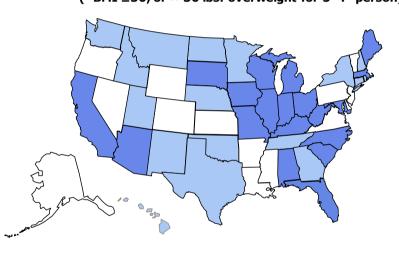




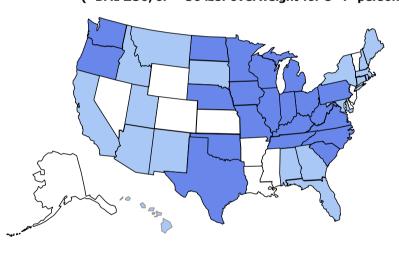


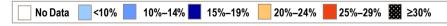


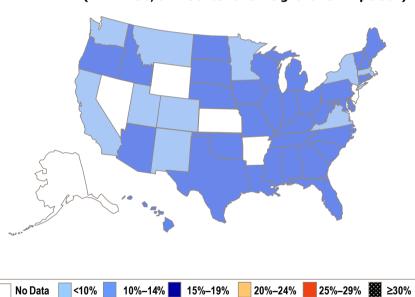
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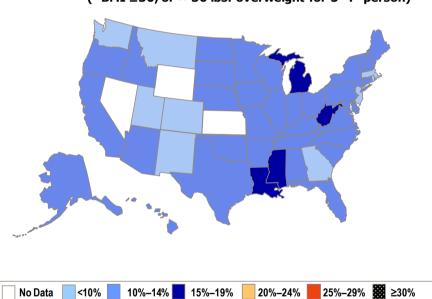


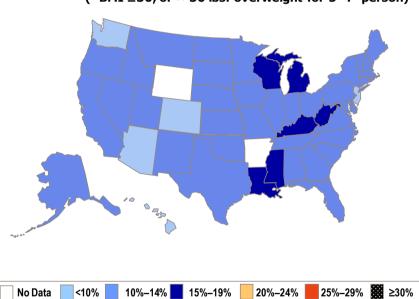
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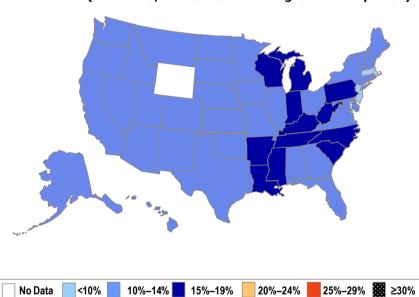


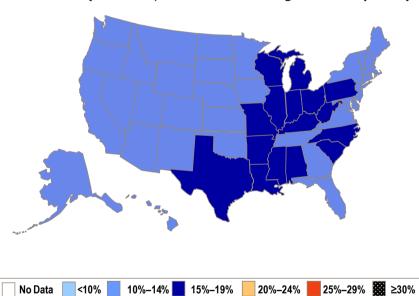


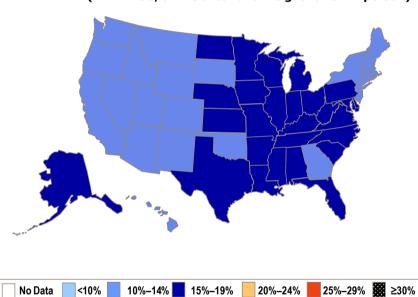


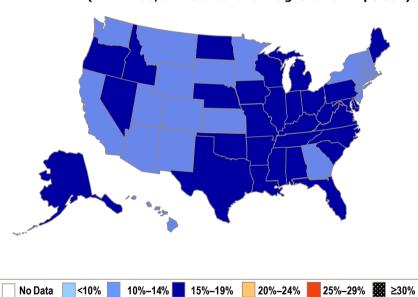


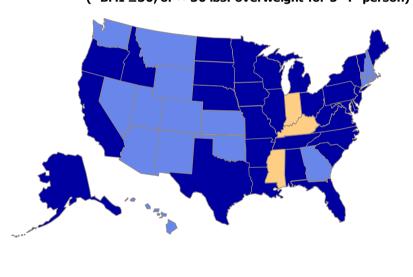


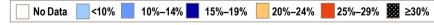




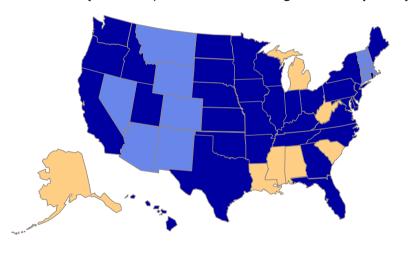




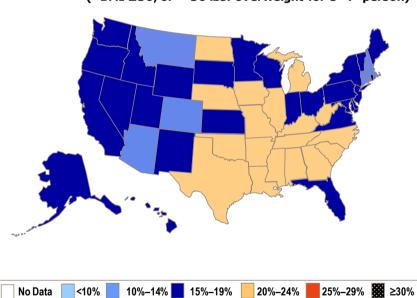


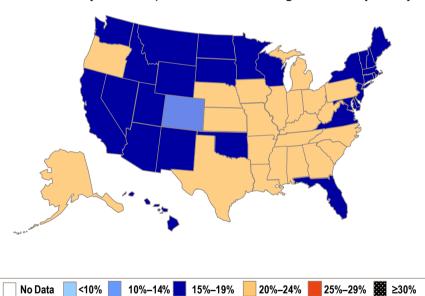


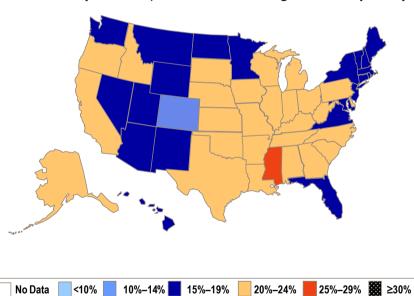
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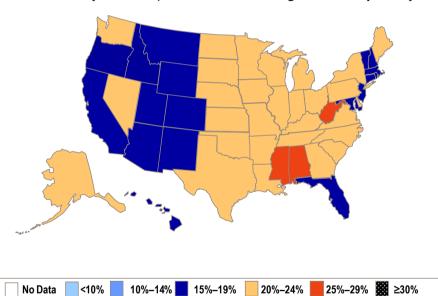


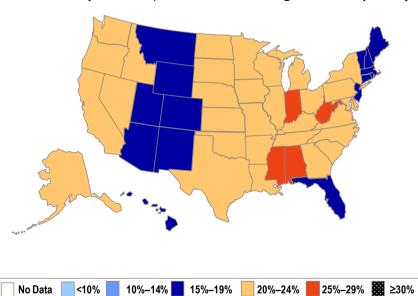
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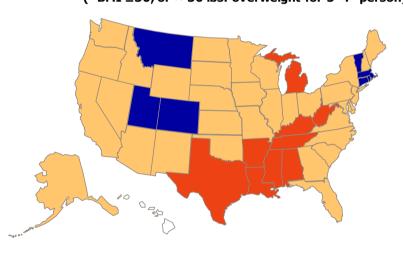




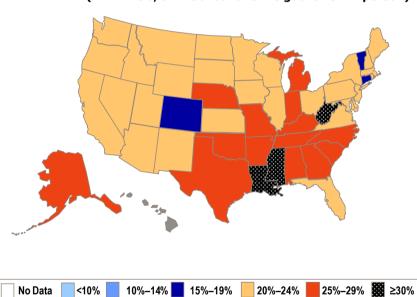


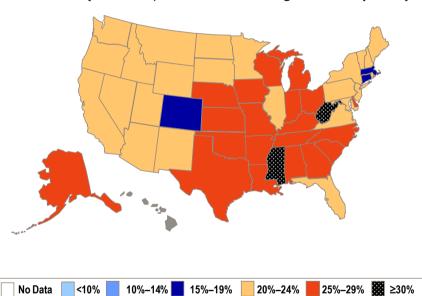


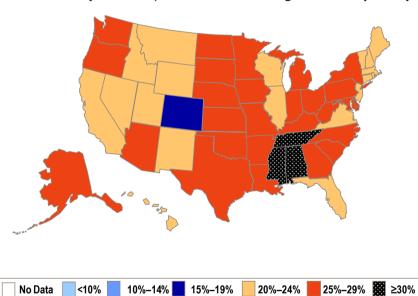
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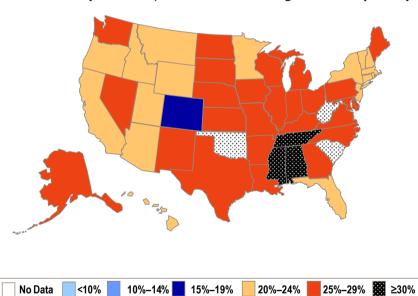


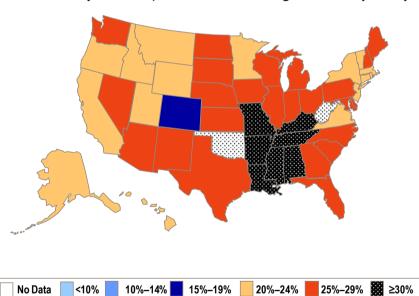
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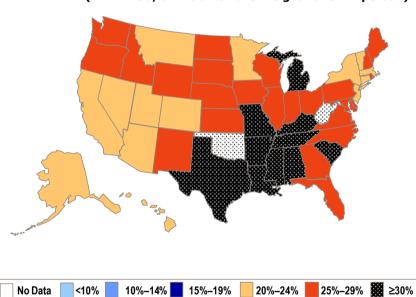












#### Obesity Trends\* Among U.S. Adults BRFSS, 1990, 2000, 2010

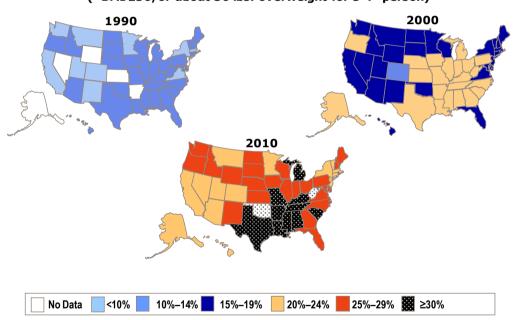
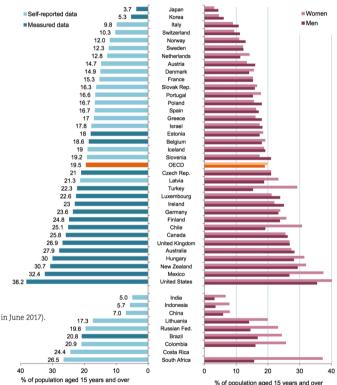


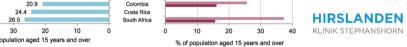
Figure 1: Obesity among adults, 2015 or nearest year



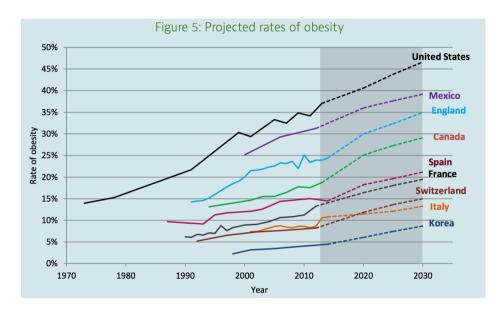


Source: OECD (2017), OECD Health Statistics 2017 (Forthcoming in June 2017). www.oecd.org/health/health-data.htm





## EIN GLOBALES PROBLEM



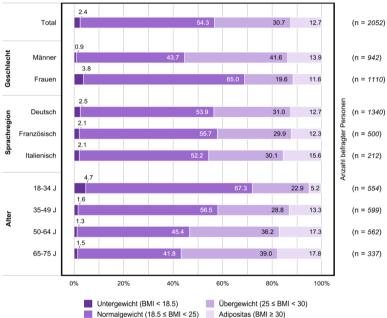
Source: OECD (2017), OECD Health Statistics 2017 (Forthcoming in June 2017). www.oecd.org/health/health-data.htm





# ADIPOSITAS IN DER SCHWEIZ 2014/2015

BMI-VERTEILUNG BEI DER ERWACHSENEN BEVÖLKERUNG DER SCHWEIZ (IN PROZENT)







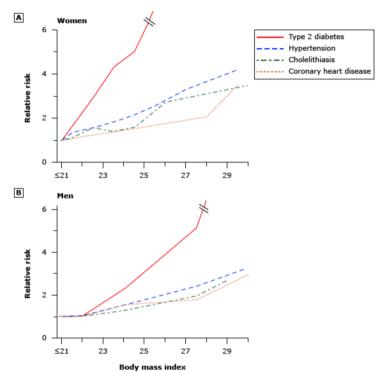
## WENN ÜBERGEWICHT ZUR KRANKHEIT WIRD

- Wie gross ist das Problem?
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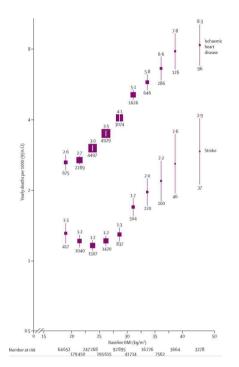
## LEIDER JA! UND WIE!

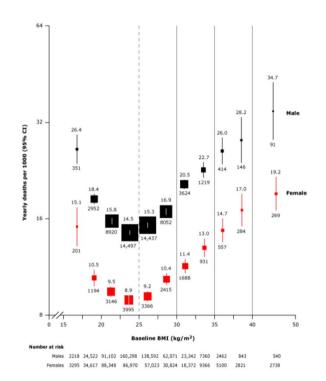






N Engl J Med 1999; 341:427.









#### **ERSTAUNLICH SCHÄDLICH**

Stoffwechsel: Diabetes, Fettstoffwechselstörungen

Herz-Kreislauf: Bluthochdruck, Herzkrankheit, Schlaganfälle, Thrombosen

Gelenk und Muskel: Osteoarthrose, Gicht

Verdauungstrakt: Leberverfettung, Refluxerkrankungen, Gallensteine

Reproduktion: Unfruchtbarkeit, Geburtskomplikationen

Nieren- und Blasenfunktion: Nierenschwäche, Nierensteine, Inkontinenz

Atmung und Lunge: Schlaf Apnoe Syndrom, Asthma

Haut: Striae, Acanthosis nigricans, vermehrter Haarwuchs

Krebs: Uterus, Nieren, Speiseröhre und Mageneingang, Dickdarm, Gallengänge

Gallenblase, Brust, Pankreas, Eierstöcke, Leber

Psychosozial: Depression, Demenz, Gefühl der Minderwertigkeit und

Ausgrenzung, gesellschaftliche Diskriminierung



Erhöhte Infektionsanfälligkeit



#### **ZUR VERDEUTLICHUNG**

- Mit einem BMI Anstieg um 1 kg/m² steigt das Risiko für Herzversagen um 5% für Männer und 7% für Frauen
- 80% von Typ 2 Diabetes ist durch Adipositas verursacht
- 40% der Krebserkrankungen in den USA entstehen durch Übergewicht
- Mit einem BMI Anstieg um 5 kg/m² steigt die allgemeine Sterblichkeit um 30% (wegen Gefässerkrankungen um 40%, wegen Diabetes um bis zu 120%, wegen Krebs um 10%, wegen Lungenerkrankungen um 20%)





#### WIESO?

 Activity of the sympathetic nervous system Activity of the renin-angiotensin-aldosterone system Mechanical stress ↑ Adipokine synthesis ↑ Lipid production Adipose tissue macrophages and other inflammatory cells Hydrolysis of triglycerides Proinflammatory cytokines Release of free fatty acids Pharyngeal soft tissue ↑ Mechanical load on joints ↑ Intraabdominal pressure Impaired insulin signaling and tinsulin resistance Dyslipidemia Systemic and pulmonary hypertension ↑ Insulin Nonalcoholic fatty liver disease Coronary artery disease Obstructive sleep apnea Type 2 diabetes Osteoarthritis Barrett's esophagus Esophageal adenocarcinoma Congestive heart failure Stroke Chronic kidney disease Figure 1. Some Pathways through Which Excess Adiposity Leads to Major Risk Factors and Common Chronic Diseases. Common chronic diseases are shown in red boxes. The dashed arrow denotes an indirect association.

N Engl J Med 2017;376:254-66





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# Spezifische Behandlung Modifizierung der Lebensweise Prävention





#### THERAPIE OPTIONEN

- Modifizierung der Lebensweise
  - Diäten und Fitnessprogramme
  - Verhaltenstherapien
  - «Comprehensive Lifestyle Interventions»
- Spezifische Behandlung
  - Medikamente: Xenical, Saxenda
  - Hilfsmittel: Bänder, Ballone, Neurostimulatoren, Aspiration, Gels
  - Bariatrische Chirurgie: Schlauchmagen, Magenbypass, BPD





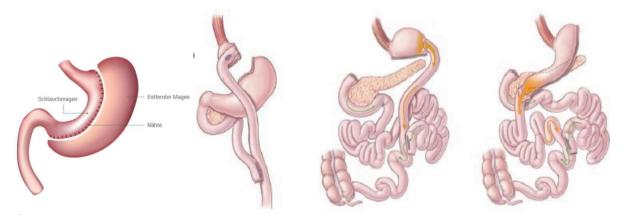
# MODIFIZIERUNG DER LEBENSWEISE HIGH INTENSITY COMPREHENSIVE LIFESTYLE INTERVENTION

Component	Weight Loss	Weight-Loss Maintenance
Counseling	≥14 in-person counseling sessions (individual or group) with a trained interventionist during a 6-mo period; recommendations for similarly structured, comprehensive Web-based interventions, as well as evidence-based commercial programs	Monthly or more frequent in-person or telephone sessions for ≥1 yr with a trained interventionist
Diet	Low-calorie diet (typically 1200–1500 kcal per day for women and 1500–1800 kcal per day for men), with macronutrient composition based on patient's prefer- ences and health status	Reduced-calorie diet, consistent with reduced body weight, with macronutrient composition based on patient's preferences and health status
Physical activity	≥150 min per week of aerobic activity (e.g., brisk walking)	200–300 min per week of aerobic activity (e.g., brisk walking)
Behavioral therapy	Daily monitoring of food intake and physical activity, facilitated by paper diaries or smart-phone applications; weekly monitoring of weight; structured curriculum of behavioral change (e.g., DPP), including goal setting, problem solving, and stimulus control; regular feedback and support from a trained interventionist	Occasional or frequent monitoring of food intake and physical activity, as needed; weekly-to-daily monitoring of weight; curriculum of behavioral change, including problem solving, cognitive restructuring, and relapse prevention; regular feedback from a trained interventionist





# SPEZIFISCHE BEHANDLUNG BARIATRISCHE CHIRURGIE



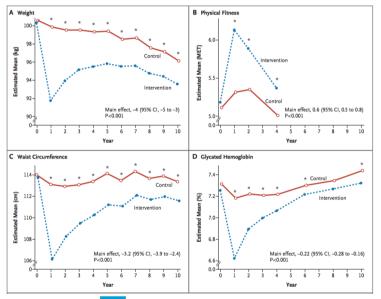
Schlauchmagen Magenbypass Biliopankreatische Diversion

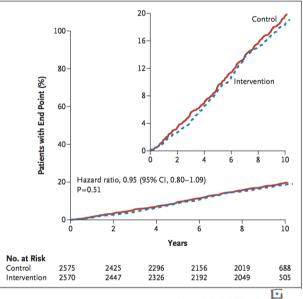




#### **MODIFIZIERUNG DER LEBENSWEISE**

#### THERAPIE EFFEKTE: "LOOK AHEAD" STUDIE







NEJM. 2013;369:145-154.



#### MODIFIZIERUNG DER LEBENSWEISE THERAPIE EFFEKTE – META-ANALYSE

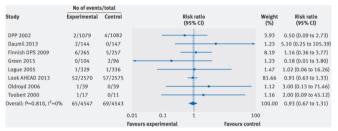


Fig 3 | Random effects meta-analysis of the effects of weight loss interventions on cardiovascular mortality. DPP=diabetes prevention program; DPS=diabetes prevention study.

	No of events/total							
Study	Experimental	Control			Risk ratio (95% CI)		Weight (%)	Risk ratio (95% CI)
Daumit 2013	0/144	1/147			:	-	4.23	0.34 (0.01 to 8.28)
Finnish DPS 2009	7/265	9/257		_			45.59	0.75 (0.29 to 2.00)
Gabriel 2011	1/253	2/255					7.53	0.50 (0.05 to 5.52)
Mengham 1999	0/38	1/37	_	-	-		4.29	0.32 (0.01 to 7.73)
Penn 2009	1/51	1/51			+		5.73	1.00 (0.06 to 15.56)
Perri 2014	0/443	1/169	-				4.22	0.13 (0.01 to 3.12)
de Vos 2014	1/203	1/204			-		5.64	1.00 (0.06 to 15.96)
de Waard 1993	3/59	5/43					22.77	0.44 (0.11 to 1.73)
Overall: P=0.967, I <sup>2</sup> =0%	13/1456	21/1163		-	<del>-</del>		100.00	0.58 (0.30 to 1.11)
			0.01	0.1	1	100	)	
			Favours ex	perimental		Favours contro	l	

BMJ 2017;359:j4849

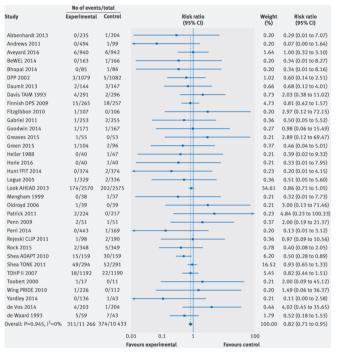
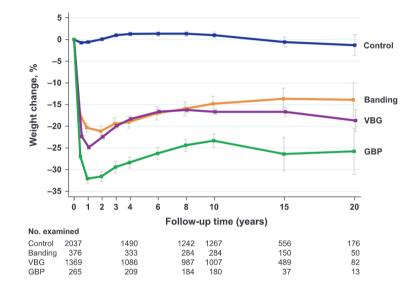


Fig 2 | Random effects meta-analysis of the effects of weight loss interventions on all cause mortality. ADAPT=arthritis, diet, and activity promotion trial; CLIP=community level interventions for pre-eclampsia; DPP-adiabetes prevention program; DPS-adiabetes prevention study; FIT=football fans in training; Look AIEAD=look action for health in diabetes; PRIDE=program to reduce incontinence by diet and exercise; TAIM=trial of antihypertensive interventions and management; TOHP=trials of hypertension prevention; TONE=trial of nonpharmacologic intervention in the elderly.

#### **BARIATRISCHE CHIRURGIE**

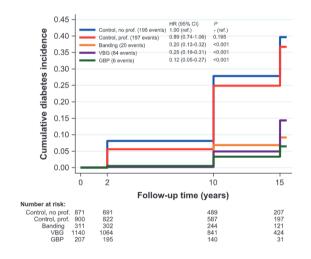
**"SOS" STUDIE** 

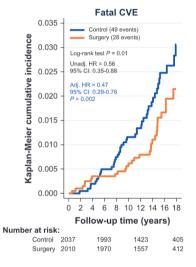


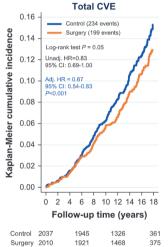




# BARIATRISCHE CHIRURGIE "SOS" STUDIE



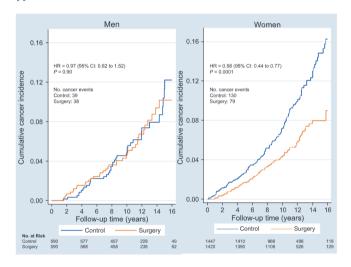


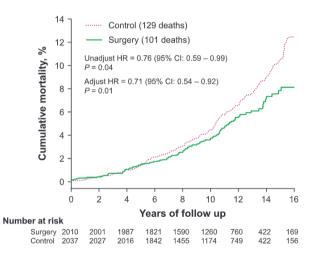






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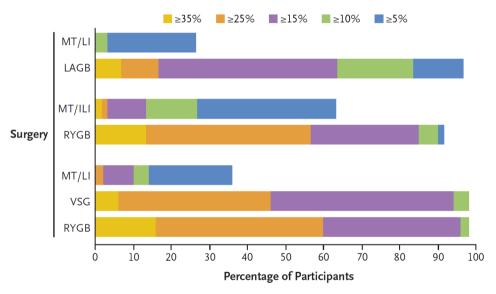








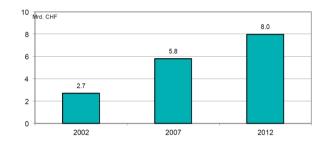
#### **GEWICHTSVERLUST IM VERGLEICH**

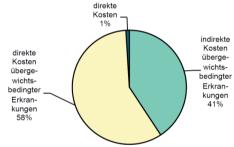




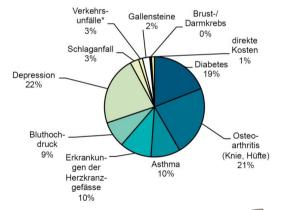


### KOSTEN VON ÜBERGEWICHT IN DER SCHWEIZ





	2007	2012	
Medikamente	25	24	
Operationen	19	50	
Konsultationen	3	3	
Total	47	77	



HIRSLANDEN KLINIK STEPHANSHORN



Schneider und Venetz (2014)

#### WENN ÜBERGEWICHT ZUR KRANKHEIT WIRD

- Fettsucht wird weltweit normal oder normaler, auch in der Schweiz.
- Übergewicht verursacht viele Krankheiten und erhöht die Sterberate.
- Gewichtsabnahme verhindert Krankheiten und verlängert die Lebensdauer.
- Massnahmen zur Gewichtsabnahme sind unterschiedlich effektiv.
- Fettsucht verursacht hohe Kosten. Davon entfallen nur ca. 1% auf die Therapiekosten für die Fettsucht selbst.





## **VIELEN DANK FÜR IHRE AUFMERKSAMKEIT!**

• Noch Fragen?



