

Joint Symposium

KSSO-KSoLA-KDA (K)

Chairpersons

Soo Lim

Seoul National University, Korea

Woo Je Lee

University of Ulsan, Korea

Speakers

Seo Young Kang

Eulji University, Korea

Dong-Hyuk Cho

Korea University, Korea

Jae-Han Jeon

Kyungpook National University, Korea

Panel Discussion

Jong-Chan Youn

The Catholic University of Korea, Korea

Jun Sung Moon

Yeungnam University, Korea

Eun Young Lee

The Catholic University of Korea, Korea



Seo Young Kang

Eulji University, Korea

• Education

Period	Affiliation	Position
- 2020	University of Ulsan College of Medicine	Ph.D.
- 2017	University of Ulsan College of Medicine	M.M.
- 2013	Eulji University School of Medicine	B.M.

• Affiliations / Experience

Period	Affiliation	Position
- 2024-Present	International Healthcare Center, Uijeonbgu Eulji Medical Center	Director
- 2023-Present	Department of Family Medicine, Uijeonbgu Eulji Medical Center, Eulji University School of Medicine	Assistant Professor
- 2022-2023	International Healthcare Center, Asan Medical Center	Clinical Assistant Professor
- 2019-2022	International Healthcare Center, Asan Medical Center	Clinical Instructor
- 2017-2019	Department of Family Medicine, Asan Medical Center	Fellow
- 2014-2017	Department of Family Medicine, Asan Medical Center	Resident
- 2013-2014	Asan Medical Center	Intern

• Publications

- Kang SY. Nutrition counseling and tailored dietary intervention for patients with obesity. *Archives of Obesity and Metabolism* 2023;2(1):11-16
- Kang SY, Park HS. Gender differences in comorbidities and attitudes regarding weight control among young adults with obesity in Korea. *Obesity Facts* 2022;15(4):581-589
- Kang SY, Kim YS. Relationships between fasting glucose levels, lifestyle factors, and metabolic parameters in Korean adults without diabetes mellitus. *Journal of Diabetes* 2022;14(1):52-63
- Kang SY, Kim YJ, Jang W, Son KY, Park HS, Kim YS. Body mass index trajectories and the risk for Alzheimer's disease among older adults. *Scientific Reports* 2021;11(1):3087
- Kang SY, Kim YJ, Park HS. Trends in the prevalence of non-alcoholic fatty liver disease and its future predictions in Korean men, 1998-2035. *J Clin Med* 2020;9(8):2626

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Interim Report for 2024 Update of Clinical Practice Guidelines for Obesity by the Korean Society for the Study of Obesity

Seo Young Kang (Eulji University, Korea)

A revised version of the Clinical Practice Guidelines for Obesity by the Korean Society for the Study of Obesity will be published at the end of 2024. In this session, the interim updates of this guideline will be discussed. The updated guideline consists of 15 sections including diagnosis of obesity, evaluation before obesity treatment, diet therapy, exercise therapy, behavioral therapy, pharmacotherapy, surgical therapy, obesity in older adults, obesity in children and adolescents, obesity in women, obesity in patients with psychiatric disorder, weight maintenance after weight reduction, metabolic syndrome, obesity treatment using information and communication technology (ICT) based intervention, and obesity-related health functional food.

For diagnosis of obesity, a statement regarding obesity diagnosis using body fat mass was added (Obesity can be diagnosed by measuring body fat mass, but additional data considering cost and utility are needed; C, Class III). Furthermore, a statement regarding applicability of diagnostic criteria for obesity among Asian population on Koreans was added (Diagnostic criteria for obesity based on BMI for Asians can be applied to Koreans; B, IIa).

In the previous diet therapy section, low calorie diet was introduced as one of the diet therapy options. In the updated version, low calorie diet was mentioned as a basis of weight reduction (Low-calorie diet is the basic diet for weight reduction, and very low calorie diet should be implemented under medical supervision; A, Class I). Furthermore, a statement regarding intermittent fasting was added (Intermittent fasting has a weight loss effect similar to that of a calorie-restricted diet, and its use for a certain period of time may be considered depending on individual's characteristics and medical conditions; A, Class IIb).

For pharmacotherapy of obesity, efficacy, safety, dosage, as well as major clinical trial results of Semaglutide were added. Heart failure was added to the table for selecting anti-obesity drugs according to comorbidities. In the surgical therapy section, the level of evidence and the grade of recommended were promoted to A, Class I from B, Class IIa for the statement "In patients with a BMI ≥ 35 kg/m² or patients with a BMI ≥ 30 kg/m² with obesity-related comorbidity, bariatric surgery is recommended when weight reduction fails with non-surgical treatment."

In obesity in children and adolescents section, face-to-face educational consultation with experts and family-centered comprehensive lifestyle modification were emphasized based on the 2023 guideline of American Academy of Pediatrics. In obesity treatment using ICT-based intervention section, a statement for pediatric patients were added (ICT-based interventions can be considered as part of a comprehensive strategy for weight reduction in obese children and adolescents; B, IIb).

In this revised version, a new section regarding obesity-related health functional food was added. In this section, mechanism for weight loss, efficacy, and safety of commonly used health functional foods including garcinia, conjugated linoleic acid, green tea and green tea extract, arginine, probiotics, caffeine, and chitosan were described. Due to the lack of firm evidence, the following two statements were made: 1) It is not recommended to use health functional foods for weight loss purposes for which the evidence is not clear (C, Class III), 2) It is not recommended to use health functional food combination therapy for the purpose of weight loss for which the evidence is not clear (C, Class III).



Dong-Hyuk Cho

Korea University, Korea

• Education

Period	Affiliation	Position
– 2015-2019	Korea University College of Medicine	Ph.D.
– 2010-2012	Korea University College of Medicine	M.S.
– 2001-2008	Korea University College of Medicine	M.D.

• Affiliations / Experience

Period	Affiliation	Position
– 2022-Present	Department of Cardiology, Korea University Anam Hospital, Seoul, Korea	Associate Professor
– 2022	Department of Cardiology, Yonsei University Wonju College of Medicine, Wonju, Gangwon, Korea	Associate Professor
– 2021-2022	Department of Cardiology, Yonsei University Wonju College of Medicine, Wonju, Gangwon, Korea	Assistant Professor
– 2020-2021	Department of Cardiology, Yonsei University Wonju College of Medicine, Wonju, Gangwon, Korea	Clinical Assistant Professor
– 2018-2020	Department of Cardiology, Korea University Anam Hospital, Seoul, Korea	Clinical Assistant Professor

• Committee Memberships

- The Korean Medical Association
- The Korean Association of Internal Medicine
- The Korean Society of Circulation
- The Korean Society of Echocardiography
- The Korean Society of Cardiometabolic Syndrome

• Publications

- Cho DH, Thom SR, Ko SM, Cha YS. Practical recommendations in the evaluation and management of cardiac injury of carbon monoxide poisoning. *JACC Heart Failure* 2024 (Accepted)
- Cho DH, Park SM. Epicardial Adipose Tissue and Heart Failure, Friend or Foe? *Diabetes & Metabolism Journal* 2024;48(3):373-384
- Cho DH, Son JW, Kim YI, Lim JH, Ko SM, Cha YS. Clinical and Echocardiographic Predictors for the Presence of Late Gadolinium Enhancement on Cardiac Magnetic Resonance Imaging in Patients with Carbon Monoxide Poisoning. *Diagnostics* 2024, 14(1), 60
- Cho JY, Cho DH, JC Youn, D Kim, BS Yoo, SM Kang. Korean Society of Heart Failure Guidelines for the Management of Heart Failure: Definition and Diagnosis. *Korean Circ J.* 2023 Apr;53(4):195-216
- Cho DH, Kim YG, Choi JM, Kim HD, Kim MN, Shim JM, Choi JI, Kim YH, Shim WJ, Park SM, Atrial Cardiomyopathy with Impaired Functional Reserve in Patients with Paroxysmal Atrial Fibrillation. *J Am Soc Echocardiogr* 2023;36:180-8

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The Impact of Anti-Obesity Agents on Dyslipidemia

Dong-Hyuk Cho (Korea University, Korea)

New obesity medications, including GLP-1 RAs and GLP-1/GIP dual agonists, have shown remarkable results, reducing body weight by 15-20% compared to baseline in obese patients. These drugs have also demonstrated improvements in CVOT outcomes in patients with diabetes or obesity, enhanced the quality of life in patients with HFpEF, alleviated OSA, and improved NASH, likely due to their effectiveness in addressing obesity, the root cause of these conditions. In this lecture, I will review how these obesity treatments not only manage weight but also improve dyslipidemia markers. I will discuss the extent to which key dyslipidemia indicators are improved in major studies, the differences between the drugs, and the remaining unmet needs.



Jae-Han Jeon

Kyungpook National University, Korea

• Education

Period	Affiliation	Position
- 2014	Kyungpook National University	Ph.D.
- 2009	Kyungpook National University	M.S.
- 2005	Kyungpook National University	M.D.

• Affiliations / Experience

Period	Affiliation	Position
- 2022-Present	Kyungpook National University	Associate Professor
- 2017	Kyungpook National University	Assistant Professor

• Committee Memberships

- Korean Society for the Study of Obesity
- Korean Diabetes Association
- Korean Endocrine Society

• Publications

- Diabetes Primes Neutrophils for Neutrophil Extracellular Trap Formation through Trained Immunity. *Research (Wash D C)*. 2024;7:0365
- Comprehensive overview of the role of mitochondrial dysfunction in the pathogenesis of acute kidney ischemia-reperfusion injury: a narrative review. *J Yeungnam. Med Sci*. 2024; 41(2):61-73
- Impact of Hyperglycemia on Immune Cell Function: A Comprehensive Review. *Diabetol Int* 2024
- Mitochondrial dysfunctions in T cells: focus on inflammatory bowel disease. *Front Immunol*. 2023 Sep 22;14:1219422
- Inhibition of pyruvate dehydrogenase kinase 4 ameliorates kidney ischemia-reperfusion injury by reducing succinate accumulation during ischemia and preserving mitochondrial function during reperfusion. *Kidney Int*;104(4):724-739

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The Impact of Anti-Obesity Agents on Glucose Metabolism

Jae-Han Jeon (Kyungpook National University, Korea)

The global rise in obesity has led to a concurrent increase in type 2 diabetes, necessitating the exploration of effective treatments. Anti-obesity agents, designed primarily to reduce body weight, have shown potential benefits on glucose metabolism. This study investigates the mechanisms by which these agents influence glucose homeostasis. In this session, I would like to review various classes of anti-obesity drugs, including GLP-1 receptor agonists, SGLT-2 inhibitors, central nervous system stimulants, as well as orlistat and phentermine, assessing their impact on insulin sensitivity, glucose uptake, and overall metabolic health. Orlistat, a lipase inhibitor, and phentermine, an appetite suppressant, are particularly examined for their roles in altering glucose metabolism. Through a comprehensive analysis of clinical trials and experimental studies, we aim to elucidate the dual role of these agents in managing both obesity and hyperglycemia. The findings underscore the importance of considering glucose metabolism in the development and prescription of anti-obesity therapies.