

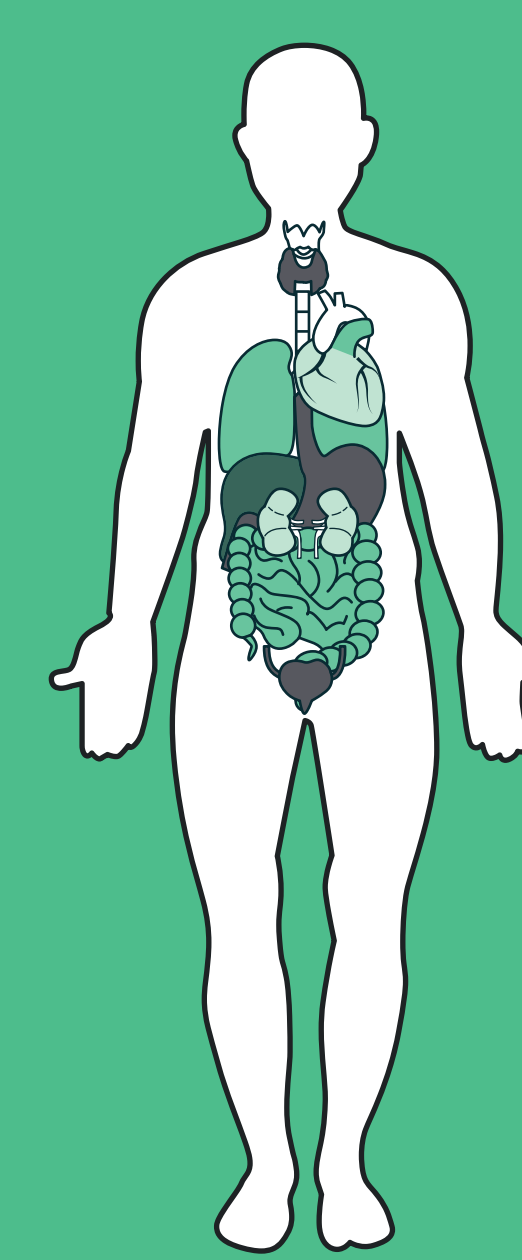
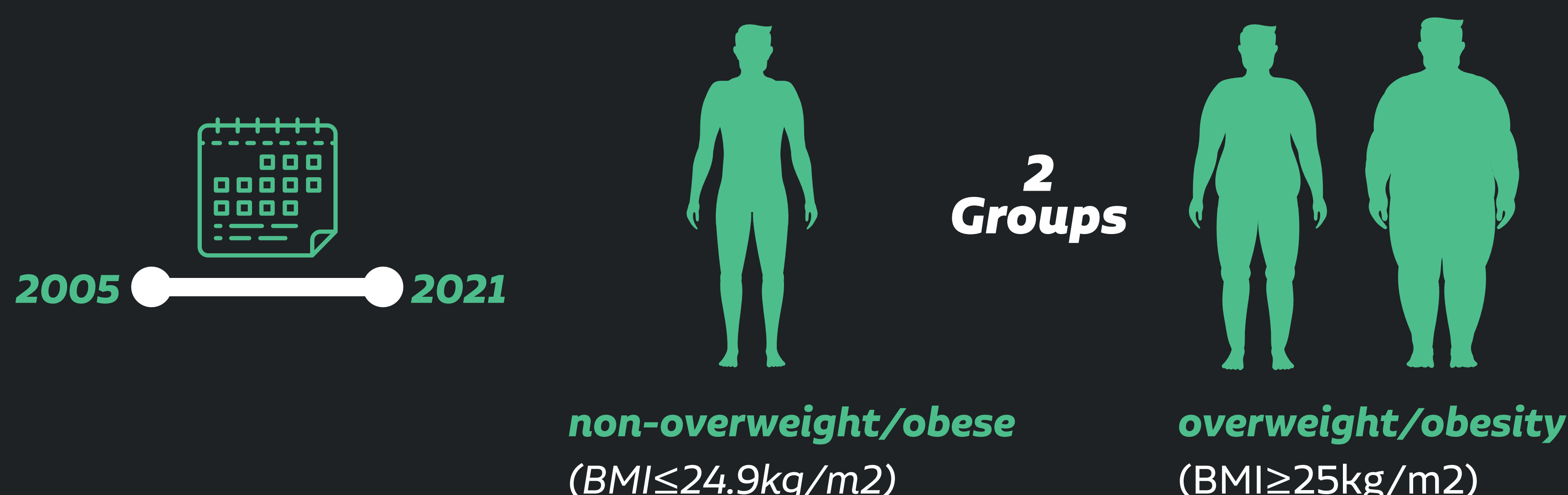
OBJECTIVES

Overweight and obesity are growing global health challenges. Body mass index (BMI) is the most frequently applied population-level measure for overall body fatness. Raised BMI is an important risk factor for cancer, which is another leading and rising health burden worldwide. About 4–8% of all cancers are attributed to obesity. This study analyzes the risk of development of cancer in overweight/obese individuals.



METHODS

Design: Retrospective cohort study from 2005 to 2021. Population: Beneficiaries who completed an epidemiological survey with body mass index information at the time of joining the health plan. Source data: Electronic health records from the administrative database. Individuals were classified into two groups: non-overweight/obese (BMI $\leq$ 24.9kg/m²) or overweight/obesity (BMI $\geq$ 25kg/m²). Logistic regression models were used to examine the associations of BMI with risk of digestive system cancers, including esophageal, stomach, colorectal, liver, gallbladder, and pancreatic cancer, as well as kidney, thyroid, breast, endometrial, and ovarian, adjusting for age and sex. For significance, Chi-square tests (Fisher's Exact), when $p < 0.05$. Confidence intervals (CI) 95%.

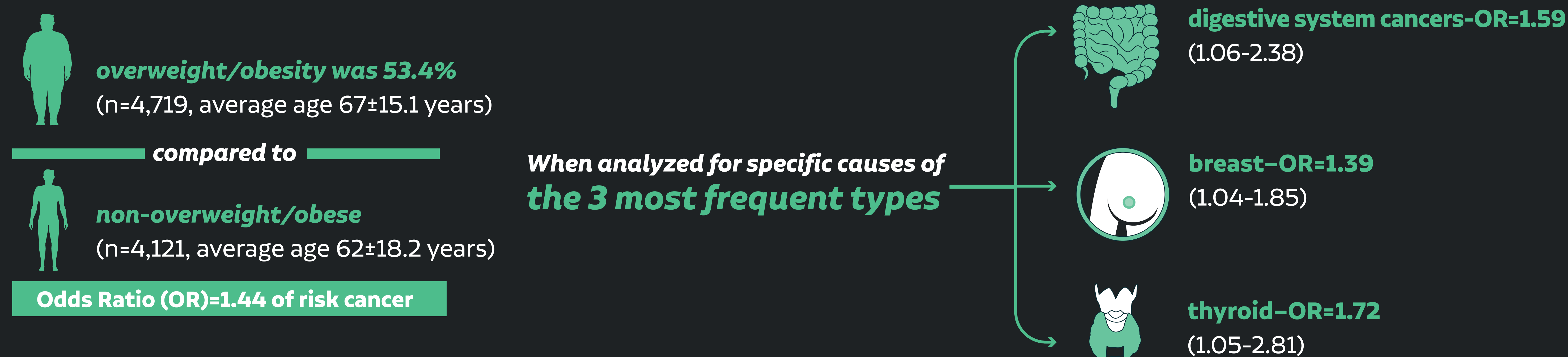


BMI and Cancer Risk Association

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RESULTS

A total of 8,840 individuals (average age 65 $\pm$ 16.8 years) were analyzed. The prevalence of overweight/obesity was 53.4% (n=4,719, average age 67 $\pm$ 15.1 years). When compared to non-overweight/obese (n=4,121, average age 62 $\pm$ 18.2 years), overweight/obesity was associated with an odds ratio (OR)=1.44 of risk cancer (95%CI:1.18-1.76). When analyzed for specific causes of the 3 most frequent types (all $p < 0.05$): digestive system cancers-OR=1.59 (1.06-2.38), breast-OR=1.39 (1.04-1.85) and thyroid-OR=1.72 (1.05-2.81).



CONCLUSIONS

Obesity increases cancer risk and mortality. Our study reflects the strong association between obesity and risk of several cancers as showed in medical literature. Overweight and obesity prevalence are rising and is expected during next years an increase in cancers related with body fatness. Weight reducing programs should be urgently encouraged including improvement of diet and physical activity to better control weight and comorbidities, including cancer.

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