

Table 1

The characteristics of selected GEO datasets

Title	Years	Country	Sample size(female/all)		Datasets	Newcastle-Ottawa Quality Assessment Scale (total scores)
			Obesity	Control		
Obesity and Race Alter Gene Expression in Skin	2020	USA	10/10	10/10	GSE151839	7
Obese Insulin Resistant Humans with Compensatory Hyperinsulinemia Dissociate Lipolysis from Glycemia as Possible Adaptive Response to Fatness	2021	Italy	8/16	6/9	GSE141432	7
RNA-seq analysis of human white adipose tissue from normal weight and obese individuals prior to and following 12-week intervention with fish oil or corn oil	2021	UK	NA/10	NA/10	GSE162653	6
Global transcriptome profiling identifies KLF15 and SLC25A10 as regulators of adipocytes insulin sensitivity in obese women	2017	Sweden	39/39	9/9	GSE94753	6
A Memory for Obesity in Adipose Tissue	2017	Sweden	16/16	16/16	GSE59034	6
Long-term changes in adipose tissue gene expression following bariatric surgery	2022	Sweden	50/50	28/28	GSE199063	7
Increased adipose tissue fibrogenesis, not impaired expandability, is associated with nonalcoholic fatty liver disease	2021	Japan	NA/45	6/12	GSE159924	6
Adipose tissue immunology, inflammation and exosomes in regulating insulin sensitivity in people with obesity and nonalcoholic fatty liver disease	2021	Japan	NA/52	NA/14	GSE156906	6
Decreased adipose tissue oxygenation is associated with insulin resistance in people with obesity	2020	Japan	NA/34	6/11	GSE152991	6

NA, not available.