

**Table 4.** Adult studies analyzing the interactions between Pro12Ala polymorphism of *PPAR* $\gamma$  gene and dietary components. Updated from of Ochoa *et al.* (2008) [36]

Studied sample	Interaction with the Pro12Ala polymorphism	Effect on phenotype	Ref.
Spanish high cardiovascular risk subjects (n=774)	Mediterranean diet with high intake of virgin olive oil and nuts in 12 Ala carriers	Lower waist circumference enlargement compared to a low fat diet in Ala carriers	[67]
Spanish adults (n=538)	Low intake of MUFA in obese Ala carriers	Higher HOMA-IR index	[66]
Subjects from the European Project on Genes in Hypertension study from Italy (n= 926)	Alcohol consumption in Ala carriers	Higher HDL levels	[63]
British Caucasian subjects (n=506)	High dietary P:S ratio in physical active Ala carriers	Lower fasting insulin levels	[120]
Women from the Nurses Health Study of USA (n=2,141)	Low intake of MUFA in Ala carriers	Higher BMI	[34]
Canadian subjects from the Quebec Family Study (n=720)	High fat intake in Pro12Pro carriers	Higher BMI and waist circumference	[64]
Obese and control subjects from the EPIC-Heidelberg study (n=308)	High intake of arachidonic acid in Ala carriers	Higher obesity risk	[35]
Spanish obese and control subjects (n=313)	High intake of carbohydrates in Ala carriers	Higher obesity risk	[33]
Caucasian, non diabetic adult subjects (n=592)	Low dietary P:S ratio in Ala carriers	Higher BMI	[32]

MUFA: Monounsaturated Fatty Acid

P:S : Polyunsaturated to saturated fatty acid ratio

*PPAR* $\gamma$  :Peroxisome proliferator-activated receptor  $\gamma$