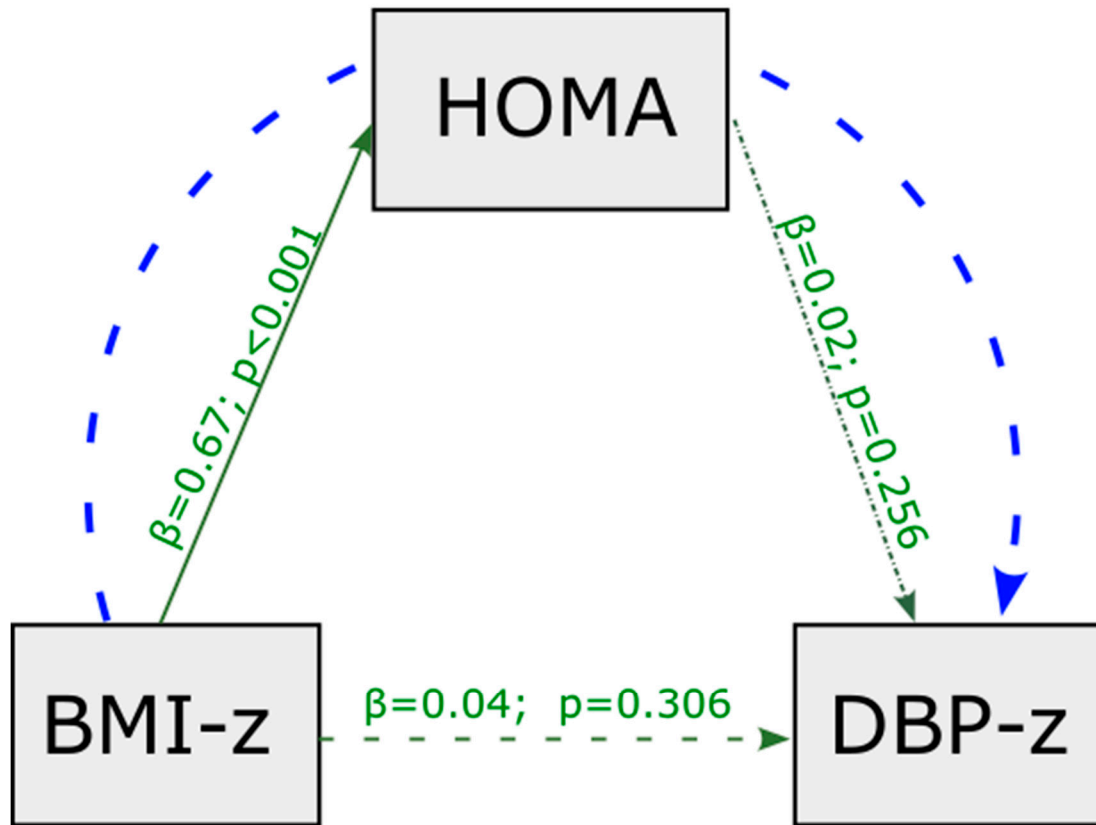


Figure S1. Mediation analysis model with DBP z-score as outcome at baseline, including HOMA-index as a mediator of the effect of BMI z-score (panel a) and WtHr (panel b) on DBP z-score.

BMI: body mass index; HOMA: Homeostasis Model Assessment; SBP: systolic blood pressure; WtHr: waist to height ratio.

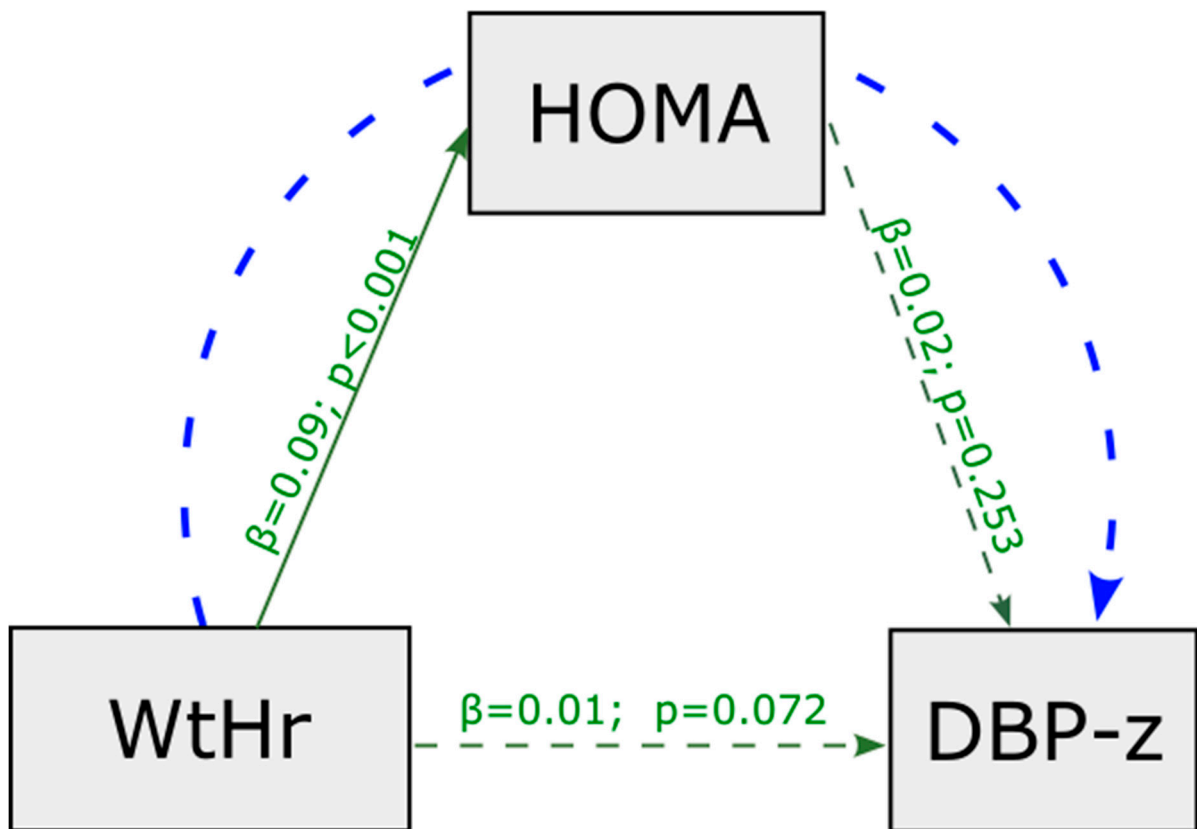
Indirect effect $\beta=0.02$; Goodman test $p=0.257$



Total effect $\beta=0.06; p=0.143$

panel a

Indirect effect $\beta=0.002$ Goodman test $p = 0.254$



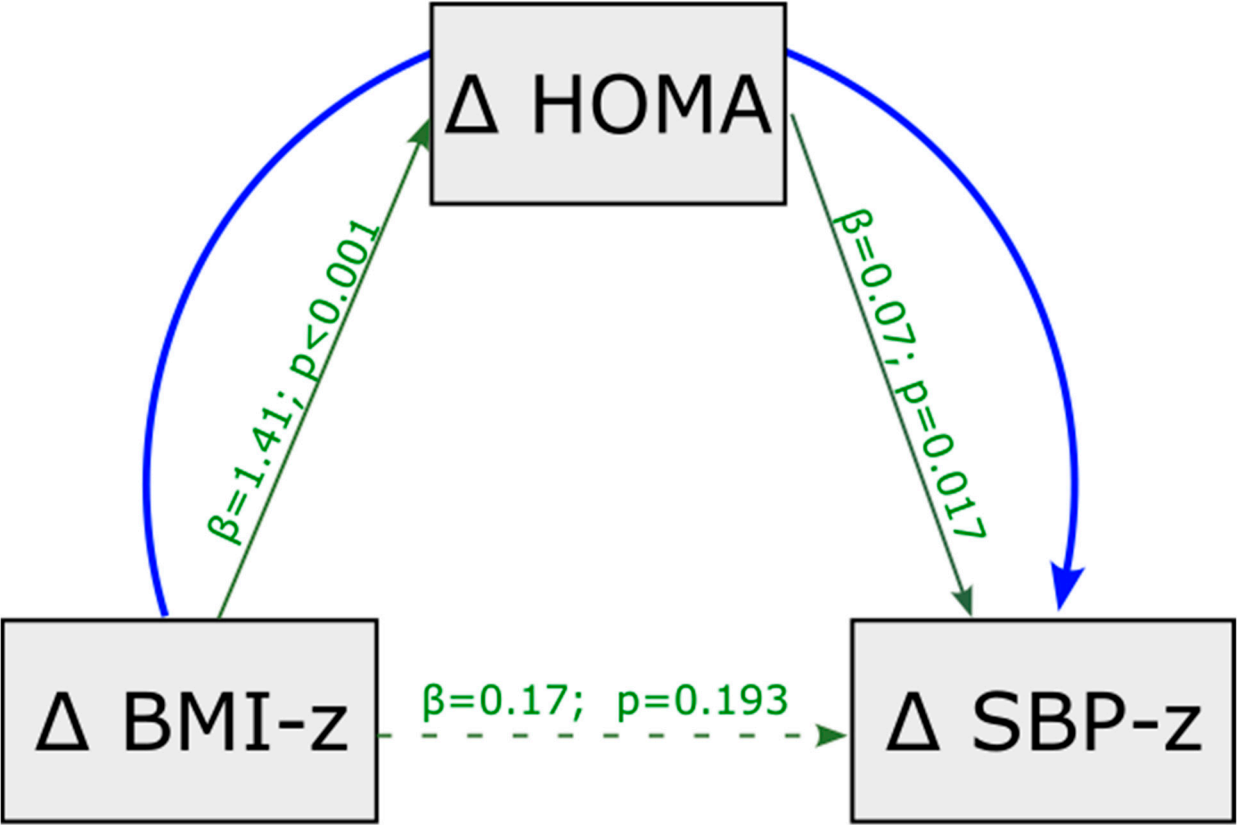
Total effect $\beta=0.01; p = 0.020$

panel b

Figure S2. Mediation analysis model with delta SBP z-score from baseline to follow-up as outcome, including delta HOMA-index as a mediator of the effect of delta BMI z-score (panel a) and delta WtHr (panel b) on delta SBP z-score adjusted by transition from pre-puberty to puberty.

BMI: body mass index; HOMA: Homeostasis Model Assessment; SBP: systolic blood pressure; WtHr: waist to height ratio.

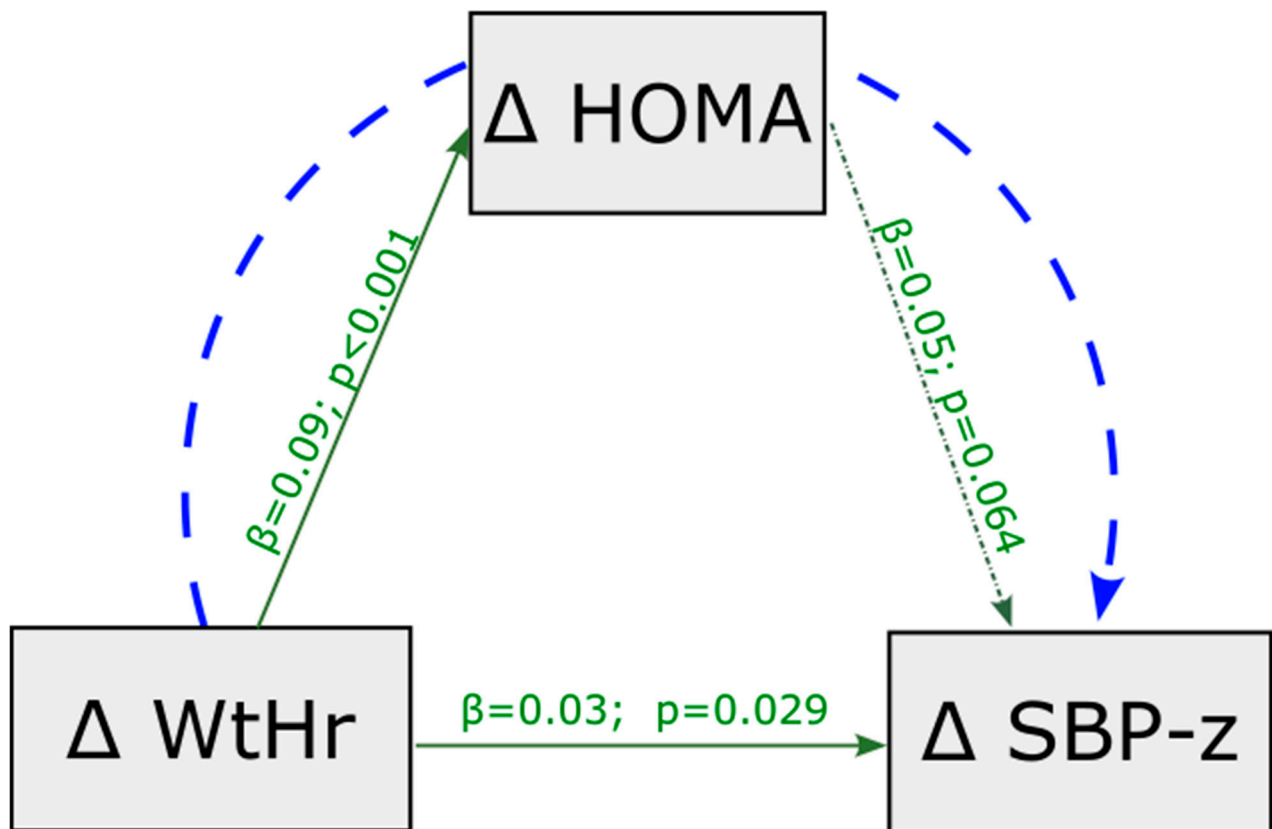
Indirect effect $\beta=0.09$; Goodman test $p = 0.024$



Total effect $\beta=0.26; p = 0.035$

panel a

Indirect effect $\beta=0.005$ Goodman test $p=0.083$



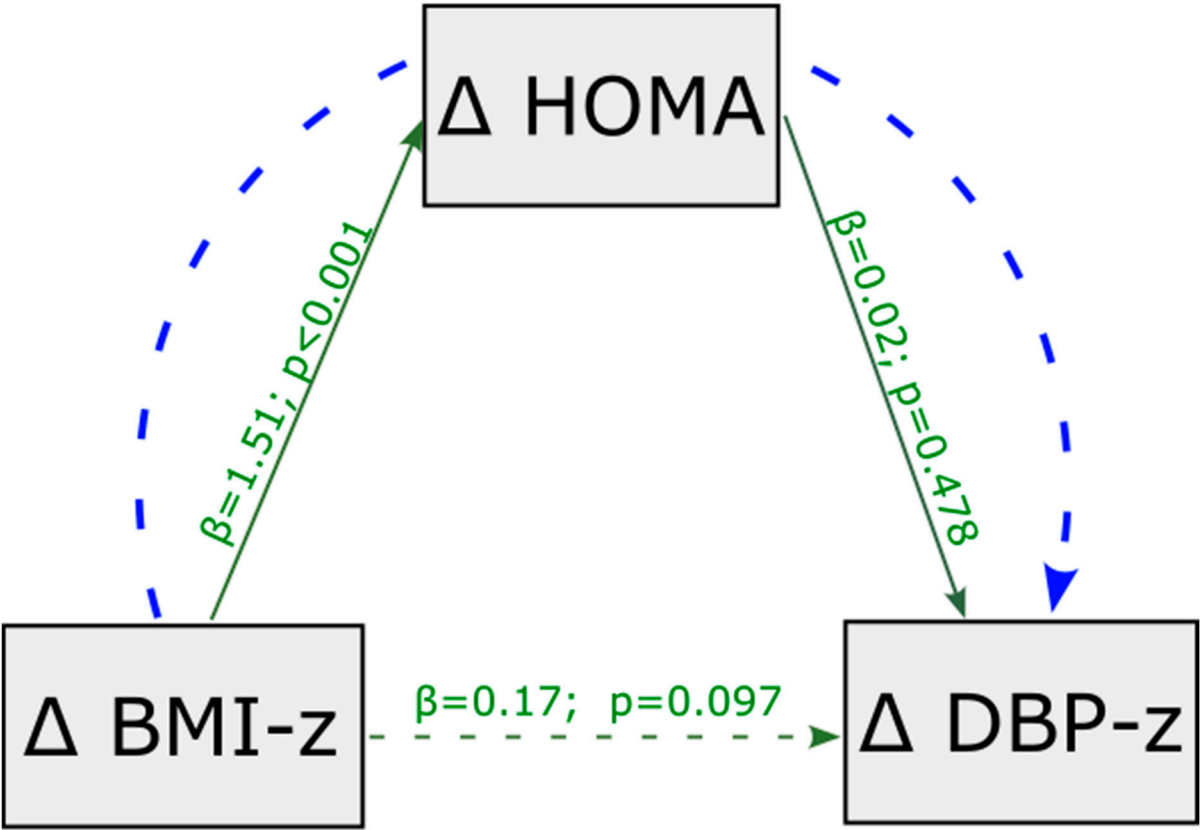
Total effect $\beta=0.03; p=0.008$

panel b

Figure S3. Mediation analysis model with delta DBP z-score from baseline to follow-up as outcome, including delta HOMA-index as a mediator of the effect of delta BMI z-score (panel a) and delta WtHr (panel b) on delta DBP z-score.

BMI: body mass index; HOMA: Homeostasis Model Assessment; SBP: systolic blood pressure; WtHr: waist to height ratio.

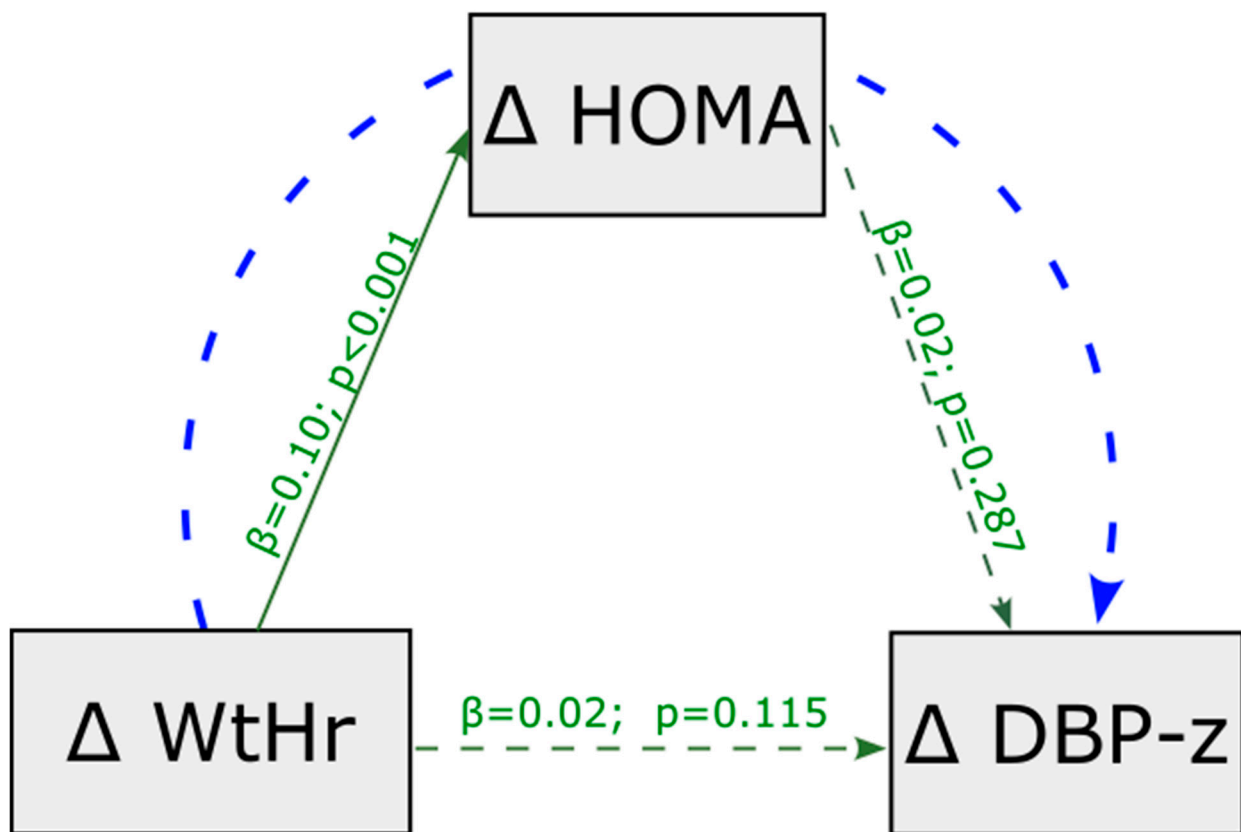
Indirect effect $\beta=0.02$; Goodman test $p = 0.475$



Total effect $\beta=0.20$; $p = 0.047$

panel a

Indirect effect $\beta=0.002$ Goodman test $p=0.288$



Total effect $\beta=0.02; p=0.059$

panel b