Supplementary Fig. 2 Mediation of intervention effects on change in total fruit diet quality by psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in total fruit diet quality. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on total fruit diet quality.
Supplementary Fig. 3 Mediation of intervention effects on change in whole fruit diet quality by psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in whole fruit diet quality. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on whole fruit diet quality.
Supplementary Fig. 4 Mediation of intervention effects on change in total vegetable diet quality by psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in total vegetable diet quality. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on total vegetable diet quality.
Mediation of Dark Green and Orange Vegetables and Legumes (DGOVL)

**Supplementary Fig. 5** Mediation of intervention effects on change in DGOVL diet quality by psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in DGOVL quality. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on DGOVL diet quality.
Supplementary Fig. 6 Mediation of intervention effects on change in whole grain diet quality by psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in whole grain quality. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on whole grain diet quality.
Supplementary Fig. 7 Mediation of intervention effects on change in SoFAAS diet quality by psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in SoFAAS quality. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on SoFAAS diet quality.
Supplementary Fig. 8 Mediation of intervention effects on change in total diet quality by decisional balance. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of decisional balance on change in total diet quality. Model coefficient $c'$ represents the indirect effect of decisional balance on total diet quality.
Supplementary Fig. 9 Mediation of intervention effects on change in total diet quality by self-efficacy. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on self-efficacy. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of self-efficacy on change in total quality. Model coefficient $c'$ represents the indirect effect of self-efficacy on total diet quality.
**Supplementary Fig. 10** Mediation of intervention effects on change in total diet quality by social support. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on social support. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of social support on change in total quality. Model coefficient $c'$ represents the indirect effect of social support on total diet quality.
Supplementary Fig. 11 Mediation of intervention effects on change aerobic physical activity by the psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in aerobic physical activity. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on aerobic physical activity.
Mediation of Aerobic Physical Activity (suboptimal vs. optimal)

Supplementary Fig. 12 Mediation of intervention effects on change aerobic physical activity by the psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in aerobic physical activity. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on aerobic physical activity.
Supplementary Fig. 13 Mediation of intervention effects on change strength/flexibility physical activity by the psychosocial constructs. Model coefficients $a_1$, $a_2$, and $a_3$ represent direct effects of the intervention on the psychosocial constructs. Model coefficients $b_1$, $b_2$, and $b_3$ represent direct effects of the psychosocial constructs on change in strength/flexibility physical activity. Model coefficient $c'$ represents the indirect effect of the psychosocial constructs on strength/flexibility physical activity.