

## 14. LIST OF TABLES AND FIGURES

### 14.1. Tables

**Table 1.** Anthropometric and major laboratory characteristics of the study subjects (means  $\pm$  S.E.M.). C = controls; BN = bulimia nervosa; BMI = body mass index; % BF = percentage of body fat; neuropeptide Y (NPY); growth hormone (GH); free fatty acids (FFA); NS = not significant;  $^{\$}P < 0.05$  BN vs. control subjects (C);  $n$  = the number of subjects.

**Table 2.** Effect of exercise (45 min, 2 W/kg of lean body mass [LBM]) alone or together with Acipimox (Aci) administration on plasma gut-brain-adipose tissue (AT) peptides in the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

\* =  $P < 0.05$ , \*\* =  $P < 0.01$ , \*\*\* =  $P < 0.001$ , \*\*\*\* =  $P < 0.0001$  vs. resting (baseline) values

$^{\$}$  =  $P < 0.05$  BN vs. control subjects (C)

$^{+}$  =  $P < 0.05$  exercise together with Aci administration vs. exercise alone, 45 minute

$^{++}$  =  $P < 0.01$  exercise together with Aci administration vs. exercise alone, 45 minute

$^{+++}$  =  $P < 0.001$  exercise together with Aci administration vs. exercise alone, 45 minute

$^{\#}$  =  $P < 0.05$  post-exercise together with Aci administration vs. exercise alone, 90 minute

**Table 3.** Effect of exercise (45 min, 2 W/kg of lean body mass [LBM]) alone (placebo) or together with Acipimox (Aci) administration on plasma glycerol, free fatty acids (FFA) and

blood glucose levels in the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

Values are means  $\pm$  S.E.M.;  $n$  = the number of subjects.

\*\* =  $P < 0.01$ , \*\*\*\* =  $P < 0.0001$  vs. resting (baseline) values

<sup>§</sup> =  $P < 0.05$  BN vs. control subjects (C)

<sup>++</sup> =  $P < 0.01$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>+++</sup> =  $P < 0.001$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>#</sup> =  $P < 0.05$  post-exercise recovering phase together with Aci administration vs. post-exercise recovering phase alone, 90 minute

**Table 4.** Dialysate glycerol concentration in subcutaneous (sc) abdominal adipose tissue (AT) during basal conditions and during exercise (45 min, 2W/ kg of lean body mass [LBM] alone or together with Acipimox (Aci) administration in the controls (C) ( $n = 7$ ) and bulimia nervosa patients (BN) ( $n = 7$ ). Values are means  $\pm$  S.E.M.;  $n$  = the number of subjects.

\*\* =  $P < 0.01$ , \*\*\*\* =  $P < 0.0001$  vs. resting (baseline) values

<sup>§</sup> =  $P < 0.05$  BN vs. control subjects (C)

<sup>\$\$</sup> =  $P < 0.01$  BN vs. control subjects (C)

<sup>++</sup> =  $P < 0.01$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>++++</sup> =  $P < 0.0001$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>#</sup> =  $P < 0.05$  post-exercise recovering phase together with Aci administration vs. post-exercise recovering phase alone, 90 minute

**Table 5.** Circulatory response of the study subjects to the exercise during Acipimox (Aci) and placebo treatment; the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

Exercise results are maximal values attained during the investigation (45 min, 2 W/kg of lean body mass [LBM]). Values are means  $\pm$  S.E.M., C = controls, BN = bulimia nervosa,  $n =$  number of subjects are in brackets, p.o., per os.

\* $P < 0.05$ , \*\*\* $P < 0.001$  vs. resting (baseline) values,  $^{\$}P < 0.05$  vs. control subjects (C),  $^{+}P < 0.05$  exercise together with Aci administration vs. exercise alone, 45 minute

## 14.2. Figures

**Fig. 1.** Effect of exercise (45 min, 2 W/kg of lean body mass, LBM) alone or together with Acipimox (Aci) administration on plasma growth hormone (GH) levels (means  $\pm$  S.E.M.) in the controls (C) ( $n=7$ ) and bulimia nervosa (BN) patients ( $n=7$ ).

$^{\$} = P < 0.05$  vs. control subjects (C)

\*\*\* =  $P < 0.001$ , \*\*\*\* =  $P < 0.0001$  vs. resting (basal) values

**Fig. 2.** Effect of exercise (45 min, 2 W/kg of lean body mass, LBM) alone or together with Acipimox (Aci) administration on plasma ghrelin levels (means  $\pm$  S.E.M.) in the controls (C) ( $n=7$ ) and bulimia nervosa (BN) patients ( $n=7$ ).

$^{\$} = P < 0.05$  BN vs. control subjects (C)

\* =  $P < 0.05$ , \*\* =  $P < 0.01$  vs. resting (basal) values

**Fig. 3.** Effect of exercise (45 min, 2 W/kg of lean body mass, LBM) alone or together with Acipimox (Aci) administration on plasma neuropeptide Y (NPY) levels (means  $\pm$  S.E.M) in the controls (C) (n=7) and bulimia nervosa (BN) patients (n=7).

\$ =  $P < 0.05$  BN vs. control subjects (C), p.o., per os

\*\* =  $P < 0.01$ , \*\*\* =  $P < 0.001$  vs. resting (baseline) values

+ =  $P < 0.05$  exercise together with Aci administration vs. exercise alone, 45 minute

**Fig. 4.** Effect of the exercise (45 min, 2 W/kg of lean body mass [LBM]) alone or together with Acipimox (Aci) administration on plasma leptin levels (means  $\pm$  S.E.M.) in the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

\$ =  $P < 0.05$  vs. control subjects (C), p.o., per os

\* =  $P < 0.05$  vs. resting (baseline) values

+ =  $P < 0.05$  exercise together with Aci administration vs. exercise alone, 45 minute

# =  $P < 0.05$  post-exercise recovering phase together with Aci administration vs. post-exercise recovering phase alone, 90 minute

**Fig. 5.** Effect of the exercise (45 min, 2 W/kg of lean body mass [LBM]) alone or together with Acipimox (Aci) administration on plasma insulin levels (means  $\pm$  S.E.M.) in the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

\$ =  $P < 0.05$  BN vs. control subjects (C), p.o., per os

\* =  $P < 0.05$ , \*\* =  $P < 0.01$  vs. resting (baseline) values

<sup>+</sup> =  $P < 0.05$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>#</sup> =  $P < 0.05$  post-exercise recovering phase together with Aci administration vs. post-exercise recovering phase alone, 90 minute

**Fig. 6.** Effect of the exercise (45 min, 2 W/kg of lean body mass [LBM]) alone or together with Acipimox (Aci) administration on plasma free fatty acids (FFA) levels (means  $\pm$  S.E.M.) in the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

\*\*\*\* =  $P < 0.0001$  vs. resting (baseline) values, p.o., per os

<sup>+</sup> =  $P < 0.05$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>#</sup> =  $P < 0.05$  post-exercise recovering phase together with Aci administration vs. post-exercise recovering phase alone, 90 minute

**Fig. 7.** Effect of the exercise (45 min, 2 W/kg of lean body mass [LBM]) alone or together with Acipimox (Aci) administration on plasma glycerol levels (means  $\pm$  S.E.M.) in the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

<sup>\$</sup> =  $P < 0.05$  BN vs. control subjects (C), p.o., per os

\*\* =  $P < 0.01$ , \*\*\*\* =  $P < 0.0001$  vs. resting (baseline) values

<sup>++</sup> =  $P < 0.01$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>+++</sup> =  $P < 0.001$  exercise together with Aci administration vs. exercise alone, 45 minute

<sup>#</sup> =  $P < 0.05$  post-exercise recovering phase together with Aci administration vs. post-exercise recovering phase alone, 90 minute

**Fig. 8.** Effect of the exercise (45 min, 2 W/kg of lean body mass [LBM]) alone or together with Acipimox (Aci) administration on microdialysate glycerol levels (means  $\pm$  S.E.M.) in the controls (C) ( $n = 7$ ) and bulimia nervosa (BN) patients ( $n = 7$ ).

$^{\$}$  =  $P < 0.05$  BN vs. control subjects (C), p.o., per os

$^{\$\$}$  =  $P < 0.01$  BN vs. control subjects (C)

$^{**}$  =  $P < 0.01$ ,  $^{****}$  =  $P < 0.0001$  vs. resting (baseline) values

$^{++}$  =  $P < 0.01$  exercise together with Aci administration vs. exercise alone, 45 minute

$^{++++}$  =  $P < 0.0001$  exercise together with Aci administration vs. exercise alone, 45 minute

$^{\#}$  =  $P < 0.05$  post-exercise recovering phase together with Aci administration vs. post-exercise recovering phase alone, 90 minute