CORRIGENDUM

Skeletal muscle low attenuation area and maximal fat oxidation rate during submaximal exercise in male obese individuals

O Dériaz *et al*

Following the publication of the above paper, the author had identified errors in the abstract and also within Table 2. The correct version of the Abstract and Table 2 is reproduced below.

BACKGROUND: Muscle triacylglycerols (TG) are known to be a source of energy during submaximal exercise.
OBJECTIVE: The aim of this study was to assess whether an index of muscle fat content is related to maximal fat oxidation rate ($FATOX_{max}$) in 58 obese men (mean age: 46.0 ± 0.8 (s.e.) y, body weight: 96.4 ± 1.4 kg, percentage fat: $31.9 \pm 0.5\%$).
DESIGN: $FATOX_{max}$ was defined as the highest value of fat oxidation rate, measured by indirect calorimetry, while walking on a treadmill (4.3 km/h) at three different slopes: 0% ($40 \pm 1\%$ of VO_{2max}), 3% ($47 \pm 1\%$ of VO_{2max}) and 6% ($58 \pm 1\%$ of VO_{2max}). Fat-free mass (FFM) and fat mass (FM) were measured with the underwater technique and scans were obtained by computed tomography (CT) at the mid thigh level to assess areas of adipose tissue within skeletal muscle, ie deep adipose tissue (DAT), subcutaneous adipose tissue (SAT), skeletal muscle (M) and low attenuation skeletal muscle (LAM, range of attenuation values: 0 – 34 Hounsfield units). LAM and DAT were used as indices of skeletal muscle fat content.
RESULTS: $FATOX_{max}$, adjusted for age, was correlated with FFM ($r = 0.26$, $P = 0.05$), LAM ($r = 0.29$, $P < 0.05$), abdominal visceral adipose tissue ($r = 0.30$, $P < 0.05$) and plasma free fatty acid levels ($r = 0.33$, $P < 0.05$) but not with SAT ($r = 0.03$) and DAT ($r = 0.21$). In a stepwise linear multiple regression, plasma FFA, age and LAM significantly predicted $FATOX_{max}$ ($r^2 = 0.27$). Each independent variable explained about 9% of the $FATOX_{max}$ variance.
CONCLUSION: LAM makes a significant but weak contribution to the modulation of fat oxidation during submaximal exercise in obese men.

Table 2 Pearson coefficients between $FATOX_{max}$, VO_{2max} and several potential predictors

Variable	Adjusted $FATOX_{max}$[a]	Adjusted $FATOX_{max}$[b]	Adjusted VO_{2max}[a]
Adjusted $FATOX_{max}$[a]	1.000	0.964	0.368*
Adjusted $FATOX_{max}$[b]	0.963*	1.000	0.314*
Adjusted VO_{2max}[a]	0.388*	0.314*	1.000
LAM	0.294*	0.178	0.314*
Abdominal AT visceral	0.299*	0.188	−0.012
Abdominal AT subcutaneous	0.177	−0.035	0.168
FFM	0.257	0.125	0.483*
FM	0.266*	0.000	0.237
Fasting FFA	0.325*	0.330*	−0.071
Thigh skeletal muscle	0.132	0.098	0.189
Thigh AT subcutaneous	0.027	−0.175	0.149
Thigh AT deep	0.211	0.098	0.213

$n = 58$, *$P < 0.05$.
[a]Variable adjusted for age.
[b]Variable adjusted for age and fat mass.
VO_{2max}, maximal oxygen consumption (lO_2/min); $FATOX_{max}$ = maximal fat oxidation rate; LAM = low attenuation muscle area; AT = adipose tissue; FM = fat mass; FFM = fat-free mass; FFA = free fatty acids.