



INJURY PREVENTION CLINIC

THERAPIST'S GUIDE TO "WHAT'S NORMAL"

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MANUAL MUSCLE TESTING

- ◆ 10% deficit is allowed between sides for dominance
- ◆ Normative values based on profiling results of >600 healthy professional ballet dancers ages 18-40 (*Liederbach, 1989*):

MUSCLE GROUP TESTED	FEMALES	MALES
Shoulder Abduction	6.2 ± 0.3 kgs	12.1 ± .07 kgs
Hip Flexion	22.3 ± 2.1 kgs	32.0 ± 3.1 kgs
Hip Abduction	15.1 ± 0.5 kgs	22.3 ± 1.7 kgs
Hip Adduction	15.2 ± 0.4 kgs	23.7 ± 0.9 kgs

BEARD / MENSTRUATION

Onset of Beard

- ◆ Related to onset of adolescence. If >16 yo, correlated with delayed growth and possibly ↑ scoliosis and bone injury risks (*Hamilton, 1993*)

Menstruation

- ◆ If onset > 16 yo, considered "delayed menarche" which is correlated with hypoestrogenism and ↑ scoliosis and stress fracture risks (*Warren, 1992*)
- ◆ If period > q 28-35 days, but less than q 6 months, considered "oligomenorrheic"
- ◆ If no period for ≥ 6 months, considered "amenorrheic" (refer to GYN)

CALORIE CONSUMPTION

- ◆ Normal kcal intake range for 20-35 yo ballet dancers at "healthy performance weights" i.e. generally weight stable [within 3#] and balanced nutritional intake. (*Liederbach et al, 1998*)

	WOMEN	MEN
AVERAGE # KCALS REST ONLY	1900 kcals/day	2100 kcals/day
AVERAGE # KCALS 5 HOURS DANCING	2400 kcals/day	2600 kcals/day

EXPOSURE

- > 5 hours dancing/day correlated with ↑ risk for fracture and other fatigue injuries (*Kadel, 1992*)