Dietary Strategies Of Elite Natural Bodybuilders

Chappell AJ[1], Simper T[1],
[1]Food and Nutrition Group, Sheffield Business School, Sheffield Hallam University.

Sheffield Hallam University

Introduction

The British Natural Bodybuilding Federation UK finals provided an opportunity to study the dietary and training practices of elite natural bodybuilders. To prepare for competition bodybuilders utilise a combination of resistance and cardiovascular exercise, calorie reduction, supplement regimes and peaking strategies[1]. Although recommendations exist[2,3], and there is a paucity of applied research in this area [4,5]. Here we report the results of a recent cross-sectional study investigating the preparation strategies of natural bodybuilders.

Results

- A total of 33 male competitors were recruited.
- Subject characteristics are presented in table 1.
- There was no difference in characteristics between those who placed in the top 5 (placed) and those who did not place (DNP).

Table 1. Subject Characteristics by Performance Group

	Age (yrs)	% Weight Loss	Wks Diet	Estimated BF%	BMI
Placed (n - 15)	36.1 (17.4)	11.1 (5.8)	23.9 (11.3)	5.0 (2.1)	24.0 (1.8)
DNP (n - 18)	31.8 (10.1)	12.5 (5.3)	23.2 (8.2)	6.9 (1.3)	24.6 (1.9)
P value	0.39	0.47	0.16	0.07	0.39

Abbreviations, Placed, bodybuilders who achieved a top 5 placing in their class, Yrs, years, Wks, weeks, BF%, body fat percentage, FFMI, fat free mass index, BMI, body mass index

- The training regimes followed are displayed in table 2.
- Aerobic exercise tended to increase towards the end of the end of contest prep.
- Once per week single bodypart training was the most popular training program.
- There was no difference in training regime between bodybuilders who placed and DNP.

Table 2. Training Regime by Performance Group

	Coach %	Aerobic Exercise (min/day)			Tr. Program	Resistance Tr. (Min /day)
		Start	Middle	End		
Placed	64.3	20.8 (24.1)	32.1 (27.2)	38.8 (28.4)	69%, BB Split 31%, 2x Per Week	90.0 (12.0)
DNP	66.7	16.4 (15.5)	24.5 (19.8)	32.5 (23.6)	85%, BB Split 15%, Powerlifting	90.0 (12.0)
P value	0.57	0.55	0.40	0.54	0.57	0.84

Abbreviations, Placed, bodybuilders who achieved a top 5 placing in their class, %, percentage, min, minutes, Start, program followed at the start of preparation, Middle, program followed during the middle of preparation, End, program followed at the end of preparation, Tr., training

- Bodybuilders who placed consumed more carbohydrate than bodybuilders who DNP (p < 0.05)
  - Start: 5.14 g/kg bw vs 3.72 g/kg/bw
  - Middle: 4.89 g/kg bw vs 3.58 g/kg/bw
- There was a trend (p = 0.08) for bodybuilders who placed to consume more protein and energy than those who DNP.
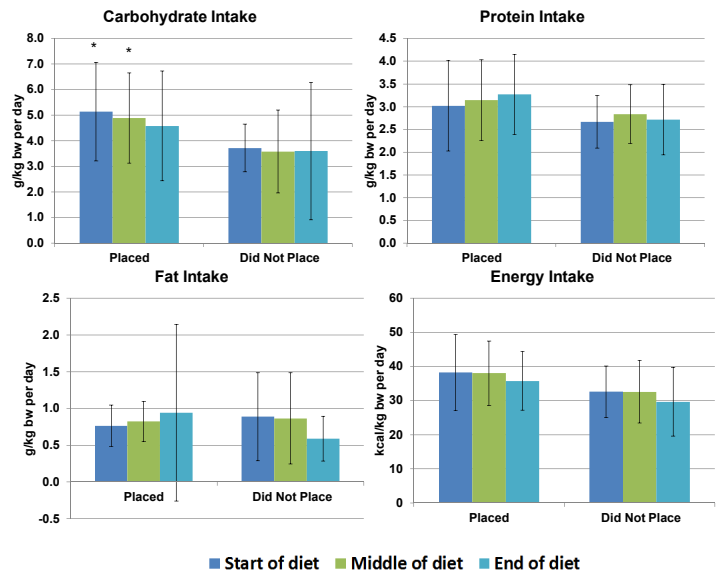
*Abbreviations, * indicates significant difference between bodybuilders who placed and those who did not place p < 0.05, Error bars are standard deviation.*

Summary

- This is the first time an attempt has been made to characterize what constitutes successful pre-contest strategies for bodybuilding.
- Carbohydrate intakes were higher than typically perceived for bodybuilding populations
- Based on our findings we suggest a high protein, high carbohydrate, low fat diet for competitive bodybuilding with at least 3g and 5g of protein and carbohydrate per kg of bw respectively.

Methods

All subjects were recruited from the BNBF British finals, an elite cohort of natural bodybuilders. After completing an informed consent form, subjects completed a semi-quantitative, 34-item dietary and lifestyle questionnaire. The questionnaire captured dietary and training habits and body weight change throughout contest preparation.. Missing data and queries were followed up via email correspondence.

Statistical analysis of exercise regimen, nutrient intake and weight loss data was performed using IBM SPSS 24. Successful bodybuilders (those placed in the top 5) and unsuccessful bodybuilders (those placed out of the top 5) were compared using an Independent T-Test and Chi Squared Test. Statistical significance was declared where P < 0.05.

References

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