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The Effects of Weight Restrictions on the Health and Performance of the Horse Racing Jockey

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Making Weight in Horse-Racing

- Methods used appear to be based more on tradition than on sound, scientific principles
- Reported Methods of Rapid Weight Loss:
 - Restricted Fluid and Calorie Intake
 - Saunas
 - Sweat Suits
 - Vomiting
 - Diuretics

Moore et al (2002); Leydon and Wall (2002); King and Mezey (1987); Labadarios (1988)



Original Study

- 27 subjects (17F, 10 NH)
- Assessments
 - *Nutritional Analysis*
 - *Blood Screening*
 - *Bone Mineral Density Screening*
 - *Hydration Analysis*
 - *Musculoskeletal Screening*
 - *Anthropometric Assessment*



Results

- Low Bone Mineral Density
 - Poor hydration practices, particularly on a competitive race day.
 - Questionable nutritional habits
 - High incidence of racing related injury
- *high risk sport or high risk individuals???*

Current Study



- **Bone health**
- **The effects of a rapid reduction in body weight on physiological and cognitive performance**
- **Energy Balance**

Investigation A

Bone Health Study

Questions to be answered.....

- *Why are jockeys showing low bone mineral density???*
- *What can be done about it???*



Preliminary Results

Possible Predictors:

- Size and stature of the jockey population
- Impact Loading
- *Nutritional Factors*



★ *Treat the Cause* ★

Investigation B

*The Effects of a Rapid Reduction
in Body Weight on Physiological
and Cognitive Function*

Methods



➔ **Baseline Testing**

➔ **“Wasting”**

➔ **Retest**



Investigation C

Energy Balance

Methods

- Energy Intake
- Energy Expenditure
- Physiological Demands of Racing



This information is necessary so that tailored training and nutritional plans can be put in place, to meet the specific demands of this unique population

An Analysis of Energy Balance of Flat Jockeys on a Competitive Race Day

- Examined caloric intake versus caloric expenditure on a competitive race day

Results

- Energy Deficiency
- Suboptimal nutritional intake



Conclusion

The weight restrictive lifestyle of the racing jockey may have a detrimental impact on physiological function, health and ultimately performance in racing jockeys



Horse Racing is a Dangerous Sport !



Future Direction

Making Weight the Healthy Way



*Specialised
Education*

*Support
Services*

Further research is required in this area so that such educational and support services can be put in place.

Continuous Professional Development Courses

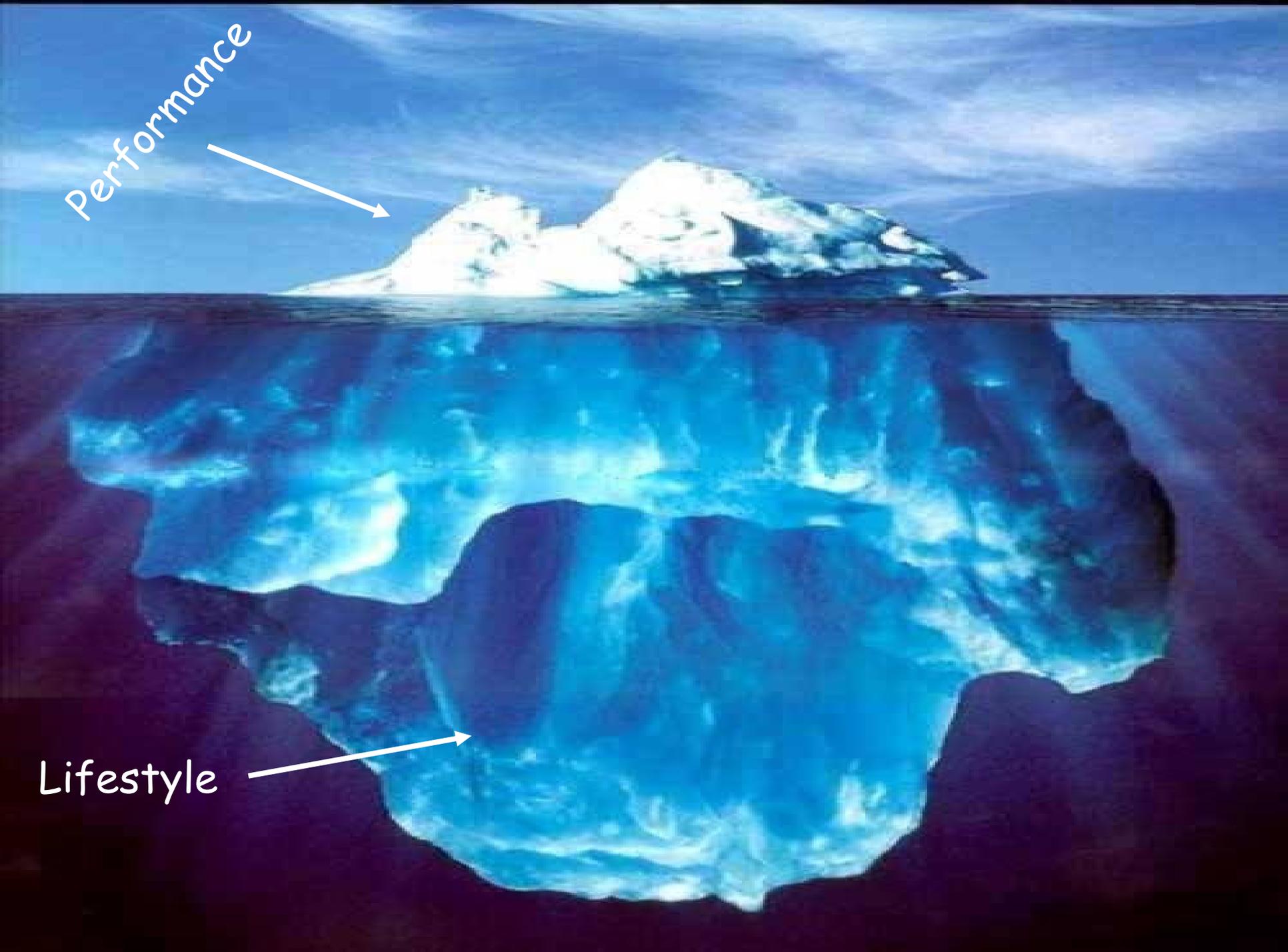
- One day mandatory course
- Nutritional, lifestyle and fitness considerations for the racing jockey
- Weight Maintenance
- Follow up one on one dietary consultation



Support Services

- Access to specialised support services, i.e. nutritionists, physical trainers, physios etc
- Improved racecourse facilities





Performance

Lifestyle

Acknowledgements

- The Turf Club
- All members of the research team involved
- All the jockeys who have participated in this study
- University of Arizona Racetrack Industry Program and Doug Reed

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