CHILDREN AND LONG DISTANCE RUNNING

Policy statement of the Australian Sports Medicine Federation – Children in Sport Committee

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Introduction

In the absence of definitive scientific evidence relating to the detrimental effects on children training for, and competing in, distance running events, and the wide range of maturity levels for any given age, it seems prudent to recommend conservative guidelines based upon potential, but currently unverified risk factors.

The following guidelines, therefore, should be viewed in that context. They represent a compromise between current practice, and what might be considered as ideal, and may be modified in the light of future research findings.

Recommended maximum competitive distances:

<table>
<thead>
<tr>
<th>Age</th>
<th>Distance</th>
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<tbody>
<tr>
<td>Under 12 years</td>
<td>5m</td>
</tr>
<tr>
<td>15 years</td>
<td>10m</td>
</tr>
<tr>
<td>15-16 years</td>
<td>1/2 Marathon</td>
</tr>
<tr>
<td>16-18 years</td>
<td>30m</td>
</tr>
<tr>
<td>18+</td>
<td>Marathon</td>
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</tbody>
</table>

Reprinted from the Sports Health Gazette
Recommended weekly maximum training distances: 3x competition distance.

Children known to be physically immature for their age should be limited to the maximum recommended distance for the age group below their own.

Further considerations and rationale:

1. Notwithstanding the recommendations, ASMF supports the following statement endorsed by the American Academy of Pediatrics in 1982 which reads, “long-distance competitive running events primarily designed for adults are not recommended for children prior to physical maturation. Under no circumstances should a full marathon be attempted by immature youths (less than Tanner stage 5, sexual maturity rating). After pubertal development is complete, guidelines for adult distance running are appropriate”.

The considerable benefits which accrue from regular aerobic activity must be weighed against the possible harmful effects of intensive training and competition on children. It should be understood that children do not need to run long distances to achieve an aerobic training effect.

2. Effects on the Musculo-Skeletal System

Particularly during periods of rapid growth, children are most vulnerable to musculo-skeletal injuries and disorders. Repetitive stress and resulting overuse syndrome may in the long term lead to musculo-skeletal disfunction.

The effect of minor deviations which would normally cause few problems are magnified when running long distances, especially on hard surfaces.

It is recommended, therefore, that:

1. All children should have a musculo-skeletal assessment before embarking upon a training/competition programme of long distance running.
2. That regular long periods of running or hard surfaces be avoided.

3. Physiological Considerations

Apart from low economy of locomotion, there do not seem to be any underlying physiological factors which would preclude children from running long distances.

Children, however, are different from adults and when compared with adults are disadvantaged by a faster stride rate and poor tolerance to heat stress. It is recommended therefore, that:

1. Children should not be encouraged to participate in competitions designed for adults.
2. Weather conditions should be cool.
3. Children should be taught about ingestion of fluids before and during a race/training session.
4. Appropriate clothing should be worn.

4. Sociological Considerations

There is a danger that the time required for training/competition in distance running may preclude a child from enjoying a wide range of social experiences.

Study, mixing with other children, developing other skills, etc., are important in normal growth and development. The Committee believes that the time devoted to running long distances should be kept in perspective.