Flame Retardants in Gymnastics Equipment

GYMNASTS CAN HAVE HIGH EXPOSURES TO FLAME RETARDANT CHEMICALS

- Levels in gymnasts were found to be up to 6 times higher than the general population [1,2]
- High levels were found in the air and dust of the gym as well as in the pit cubes and landing mats [1].

FLAME RETARDANTS ESCAPE FROM FOAM

- They are added to polyurethane foam to meet flammability standards for furniture in 1975.
- They are continuously released in to air and dust from the foam, even in older products.
- They get on our skin where they can be absorbed or accidentally ingested. They are also inhaled.
- PentaBDE flame retardants were phased out of use in 2005 due to health concerns, but were replaced with other flame retardants (TDCIPP, TPHP).

THE FOAM IN YOUR GYM LIKELY CONTAINS FLAME RETARDANT CHEMICALS

- Many gyms have been required by their local Fire Marshall to purchase equipment containing flame retardants.
- 89% of pit cubes collected from 11 gyms across the U.S. were found to contain flame retardants [2]. Landing mats and sting mats were also indicated to contain flame retardants [1].

FLAME RETARDANTS CAN DISRUPT ACTION OF THYROID HORMONE

- Thyroid hormone is important for development and metabolism, particuarlly during early life. Population-based studies have found effects on fertility and neurodevelopment [3-5]. One of the flame retardants found in gyms is considered a carcinogen by the State of California [6].

WAYS TO HELP REDUCE YOUR EXPOSURE

- Wash your hands with *soap and water* after practice and before you eat. This should help reduce the amount of chemical entering your body. Hand sanitizer is not effective at removing flame retardants.
- Talk to your gym about these concerns. Ask them to adopt a handwashing policy and to purchase equipment free of flame retardants in the future.

FIRE SAFETY WITHOUT FLAME RETARDANTS

- Furniture flammability standards have been changed to negate the use of flame retardants in foam.
- The furniture flammability standard has been widely applied to gyms.
- Gyms can ask their Fire Marshall to consider ways to maintain fire safety without the use of flame retardants.
- Visit www.gymnastcollaborative for more information and updates.

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