



“Continent” doesn’t always mean continent under load

*Does an 11-minute
trampoline protocol induce
urinary incontinence among
asymptomatic, nulliparous
active females who self-
report being continent?*



Aim

To determine whether a standardized 1-minute mini-trampoline protocol induces urinary incontinence (UI) among physically active, nulliparous, continent females who report never having experienced UI during daily physical activities.



Methods



- Cross-sectional interventional study
- Nulliparous females, 18-40 years, physically active, self-reported continent (n=27)
- Bladder volume standardized to 100-200 mL (transabdominal ultrasound)
- 11-min trampoline protocol: 10 min self-selected + 1 min maximal challenge
- Self-reported UI and urge to void every 2 min
- Bladder volume measured pre and post

Participants



n=27



Age: 24.4 ± 2.3 years



Highly active: 6.7 ± 3.8 times/week

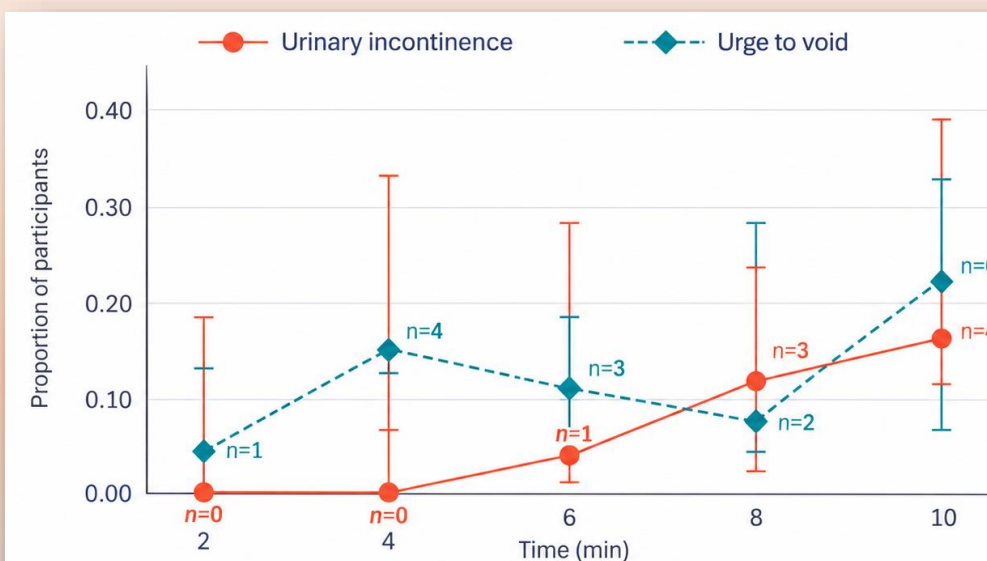


Nulliparous



Pre-exercise bladder volume: 142 ± 36 mL

Proportion of participants reporting urinary incontinence and urge to void during the 11-minutes protocol (n=27)



6/27 (22.2 %)

Reported UI
(95% CI 10.4%–40.1%)

2/27 (7.4%)

Reported possible UI
(95% CI 2.1–23.4%)

6/8

with UI or possible UI also
reported an urge to void

Error bars represent 95% confidence intervals (Wilson score). n = 27 participants at each timepoint.

Borg RPE
(mean ± SD)

8.7 ± 1.5

Final maximal challenge

→ higher Rating of Perceived Exertion (RPE)

12.7 ± 2.6

“ UI was described as single events
(small drops in five participants
and a gush in one participant). ”



Conclusion:

A single bout of high-impact activity may induce UI and urinary urgency in more than one in five females who are otherwise continent during physical activities.
High-impact loading can reveal UI that is not experienced during usual physical activity.

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