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SNorepinephrine Transporter Blocker Atomoxetine Increases Salivary Alpha Amylase

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Highlights

- Healthy adults received 1 dose of atomoxetine, which increases norepinephrine levels Atomoxetine increased salivary alpha amylase
- Atomoxetine increased salivary cortisol, replicating previous work
- Robust correlation between treatment effects on salivary alpha amylase and cortisol

Abstract

It has been suggested that central norepinephrine (NE) activity may be inferred from increases in salivary alpha-amylase (SAA), but data in favor of this proposition is limited. We administered 40 mg of atomoxetine, a selective NE transporter blocker that increases central NE levels, to 24 healthy adult participants in a double-blind, placebo-controlled cross-over design. Atomoxetine administration significantly increased SAA secretion and concentrations at 75 to 180 minutes after treatment (more than doubling baseline levels). Consistent with evidence that elevation in central NE is a co-determinant of