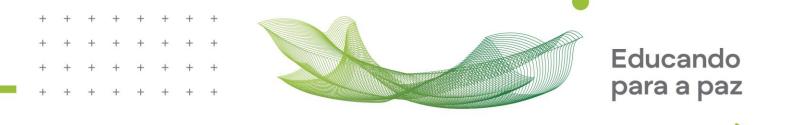


Тіро	Periódico
Título	Role of $A_1$ and $A_{2A}$ adenosine receptor agonists in adipose tissue inflammation induced by obesity in mice
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Resumo	Adenosine receptors are expressed in adipose tissue and control physiological and pathological events such as <u>lipolysis</u> and inflammation. The aim of this study was to evaluate the activity of $N^6$ -cyclopentyladenosine (CPA), a potent and selective A <sub>1</sub> adenosine receptor agonist; 2-p-(2-carboxyethyl)phenethylamino-5'-N-ethylcarboxyamidoadenosine hydrochloride (CGS-21680), an A <sub>2A</sub> adenosine receptor agonist; and 5'-N-ethylcarboxamidoadenosine (NECA), a potent non-selective adenosine receptor agonist on adipose tissue inflammatory alterations induced by obesity in mice. Swiss mice were fed with a high-fat diet for 12 weeks and agonists were administered in the last two weeks. Body weight, adiposity and glucose homeostasis were evaluated. Inflammation in adipose tissue was assessed by evaluation of adipose tissue was also evaluated. Mice that received <u>CGS21680</u> presented an improvement in glucose homeostasis in association with systemically reduced inflammatory markers (TNF- $\alpha$ , PAI-1) and in the visceral adipose tissue of this group of mice. NECA-treated mice presented some improvements in glucose homeostasis associated with an observed weight loss. Mice that received CPA presented only a reduction in the <i>ex vivo</i> basal lipolysis rate measured within visceral adipose tissue. In conclusion, administration of the A <sub>2A</sub> receptor agonist to <u>obese mice</u> resulted in



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	improvements in glucose homeostasis and adipose tissue inflammation, corroborating
	the idea that new therapeutics to treat obesity could emerge from these compounds.
Fomento	

