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## REVIEW ARTICLE

# Pulsatility of insulin release – a clinically important phenomenon

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### Abstract

The mechanisms and clinical importance of pulsatile insulin release are presented against the background of more than half a century of companionship with the islets of Langerhans. The insulin-secreting  $\beta$ -cells are oscillators with intrinsic variations of cytoplasmic ATP and  $\text{Ca}^{2+}$ . Within the islets the  $\beta$ -cells are mutually entrained into a common rhythm by gap junctions and

