

EDITORIAL

No Way of Telling What Lies Ahead in One's Life

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The Japan Endocrine Society has had a long history since it was established in April, 1927 and we are very proud of the outstanding researchers and clinicians in our Society who have devoted themselves to opening new doors to numerous scientific and clinical areas. One such person was Dr. Joukichi Takamine, known as the first person to crystallize adrenaline from the adrenal gland. The scientific and clinical fields of endocrinology cover various organs, including the brain hypothalamus, pituitary, thyroid, parathyroid and adrenal glands, pancreas, liver, gastrointestinal (GI) tract and reproductive organs, as well as metabolic processes associated with diabetes mellitus, obesity, hyper-

tension, lipids and bone minerals (Figure). Moreover, a growing body of evidence suggests that many other tissues are recognized as endocrine organs that synthesize and secrete a number of bioactive hormones. There are instances in which the adipocytes, skeletal muscle and bone, as well as the heart, secrete hormones into the blood. Conversely, these endocrine organs/tissues receive and integrate many signals from other organs, to organize and maintain metabolic and energy homeostasis. Disruption of these signals eventually leads to the development of disorders.

In recent years, members of our Society have discovered and pioneered novel molecules and intracellular signal pathways. For example, ghrelin in the GI mucosa and adiponectin in adipose tissues were discovered, and many intracellular signals controlling the function of nuclear hormone receptors, as well as the metabolic pathway of the liver with the brain, were identified. Moreover, an animal model of Graves' disease and a way of leptin treatment for patients with certain types of lipodystrophy were established. These findings continue to stimulate a number of aspects of scientific and clinical fields, aside from the area of endocrinology. Therefore, we endocrinologists should always be mindful of whatever is occurring in clinical and research-related fields, and attractive ideas and concepts must be explored to identify novel molecules and unlock new signaling pathways. Because many tissues have been shown to act also as endocrine organs, we are entering a new era in which major opportunities exist for being recognized as the first person to identify a novel molecule.

Finally, I would like to close this preface by announcing that the field of Endocrinology is a worthy challenge and that there is no way of telling what lies ahead in one's life.

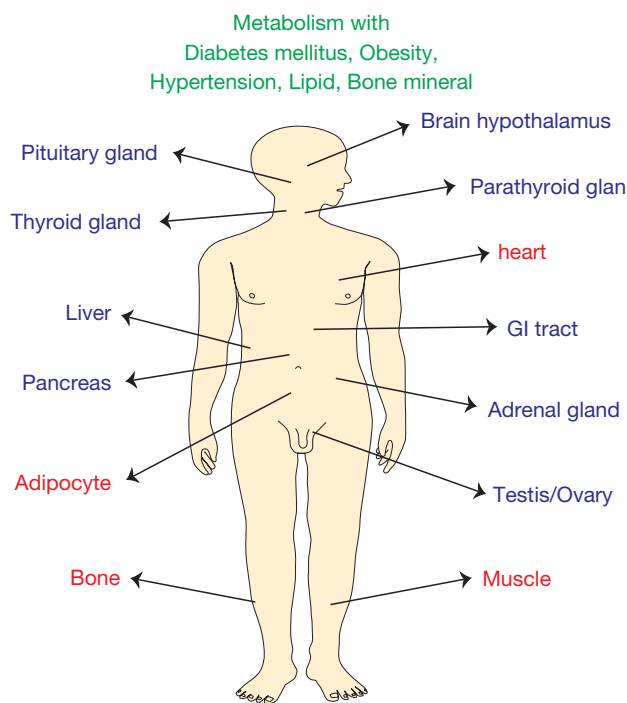


Fig. Distribution of endocrine organs and their associated-metabolism in the body