

The Genealogy of Infant Formula Tariff-rate Quotas

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This EBOT is one of a series addressing production, regulation, and trade of infant formula. FDA-mandated and voluntary recalls of infant formula and an FDA-mandated plant closure in February 2022 contributed to infant formula supply shortages (See [U.S. Infant Formula Shortage and Supply and Trade Dynamics](#)). Media reports criticized U.S. tariff-rate quotas (TRQs) and other non-tariff trade barriers (e.g., FDA labeling requirements), as having contributed to the shortage. TRQs on dairy-based products, including infant formula, have deep roots based on early development of infant formulas and Section 22 of the Agricultural Adjustment Act of 1933, and were implemented long before there were specific duty classifications for infant formula or U.S. free trade agreements. This EBOT describes how TRQs came to cover infant formula.

Infant Formula Classified as a Dairy Product

Since the earliest developments in commercial infant formula production starting in 1865, cow's milk, based on its abundance, was the primary ingredient of most infant formula recipes.¹ By 1883, 27 patented infant formula brands existed in the United States, mostly consisting of condensed cow's milk, plus added sugars, starches, and dextrans. Over time, manufacturers added other essential nutrients, including proteins, vitamins, and minerals, and developed the first soy-based formulas in the 1920s for infants allergic to cow's milk. About 69 percent of infants fed formula received cow's milk formula circa 2015.²

As regulation of commercially produced infant formulas increased and manufacturers fine-tuned recipes to resemble human milk more closely, cow's milk continued to be the primary source of major nutrients in infant formulas: fats, proteins, and carbohydrates. The American Medical Association (AMA) first formed a committee to review and approve the safety and quality of U.S.-produced formulas in 1929.³ The American Academy of Pediatrics set recommended levels for vitamins and minerals in 1967.⁴ The Infant Formula Act of 1980 authorized the Food and Drug Administration (FDA) to regulate infant formula quality, to mandate testing, and to regulate minimum and maximum amounts of nutrients, including both domestic and imported products.⁵ Efforts to improve and regulate infant formula, however, did not generally alter the use of ingredients from cow's milk as the primary source of most major nutrients.⁶

How Did Infant Formula Come to be Covered by Dairy-Based TRQs?

The genealogy of TRQs covering infant formula is based on legacies of New Deal legislation, dairy product tariff classification, and multilateral trade agreements (figure 1). Though barely remembered outside of certain agricultural circles, Section 22, a 1935 amendment to the Agricultural Adjustment Act (AAA) of 1933,⁷ was the primary catalyst that eventually resulted in U.S. infant formula imports being subject to

¹ Stevens, Patrick, and Pickler, "A History of Infant Feeding," 2009, 32–39.

² Rossen, et. al., "Types of Infant Formulas Consumed in the United States," 2016.

³ Stevens, Patrick, and Pickler, "A History of Infant Feeding," 2009, 32–39.

⁴ Schuman, "A Concise History of Infant Formula," 2003.

⁵ Newberry, "The Infant Formula Act of 1980," 1982.

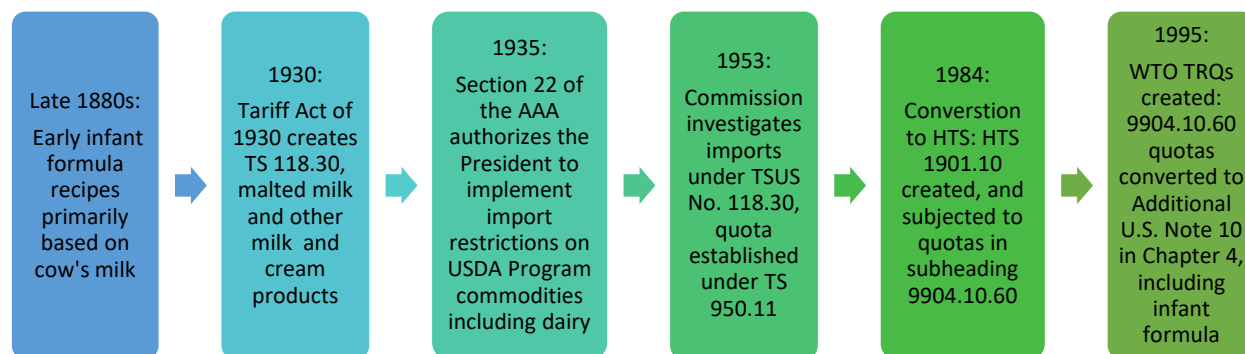
⁶ While milk is a primary source of protein and carbohydrates, many modern infant formulas recipes have replaced milkfat with vegetable fats (e.g., soy and palm).

⁷ The Agricultural Adjustment Act was New Deal era legislation designed to boost agricultural prices and rural prosperity by reducing agricultural surpluses.

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TRQs.⁸ Section 22 of the AAA authorized the President to restrict commodity imports, including using quotas, that rendered ineffective or materially interfered with USDA commodity programs. The U.S. Tariff Commission (which later became the U.S. International Trade Commission, hereafter “Commission”) was required, on direction of the President, to investigate and report findings and recommendations to the President regarding imports of Section 22 products.

Figure 1: Timeline of Infant Formula TRQs.



The Commission first investigated dairy products under Section 22 in 1953.⁹ In this investigation, the Commission found that the listed articles were “practically certain” to be imported into the United States in quantities that would “render or tend to render ineffective, or materially interfere with,” USDA commodity programs. As a result, the Commission recommended a quota of 6,000 pounds on malted milk and milk mixtures (TS 118.30) leading to the creation TS subheading 950.11.¹⁰ HTS subheading 1901.10—specifically covering infant formula put up for retail sale—came to be when the United States implemented the Harmonized Tariff Schedule in 1984. At the same time, the Section 22 quota established by TS subheading 950.11 was converted to subheading 9904.10.60 that included subheading 1901.10.¹¹ In 1995, implementation of the Uruguay Round Agreement on Agriculture converted subheading 9904.10.60 to Additional U.S. Note 10 to Chapter 4, which included subheadings 1901.10.35 and 1901.10.80 covering infant formula; thus, completing the genealogy of TRQs on infant formula.¹²

⁸ Tariff rate quotas are a two-tiered system under which a specified quantity of imported merchandise enters at a reduced duty rate during the quota period. Additional quantities are not limited but are subject to higher duty rates. TRQs were heavily used in the implementation of the agricultural provisions of the Uruguay Round Agreement and have since been used in many U.S. FTAs with respect to sensitive agricultural products.

⁹ United States Tariff Commission, “Investigations Under Section 22 of the Agricultural Adjustment Act,” Second Edition, September 1955; Presidential Proclamation No. 3019, 18 FR 3361 (June 12, 1955).

¹⁰ By the law, section 22 quotas recommended by the Commission should not be less than 50 percent of imports during a representative period determined by the Commission. U.S. Tariff Commission, *Specified Manufactured Dairy Products, Flaxseed and Linseed Oil, Peanuts and Peanut Oil, Tung Nuts and Tung Oil*, June 1953, 5–6.

¹¹ Implementation of the HTS converted TS subheading 950.11 to HTS 8-digit subheading 9904.10.60 covering items provided for in HTS subheadings 0402.29, 0402.99.60, 0404.90.20, 1704.90.40, 1901.10 (preparations for infant use, put up for retail sale), 1901.90.30, or 2202.90.20.

¹² Implementation of the URAA required that the United States convert all Section 22 quotas to TRQs. The TS subheadings that implemented Section 22 quotas became enumerated TRQs in additional notes in Chapter 4 of the HTS. This change made HTS subheadings 1901.10.35 and 1901.10.80 covering infant formula subject to TRQs under Additional U.S. Note 10 to Chapter 4.

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