

vereinigung der deutschen Gartenbauwirtschaft) agreed to reduce certain dyes in tomato products and marmalades, and to look into whether the "greening" of preserved vegetables could be eliminated (the trend was already to avoid copper colorings, since they tended to corrode food containers).¹⁶² A trade association representing dairymen wanted to keep its colorings, though it, too, eventually agreed to reduce the dyes added to butter.¹⁶³ Reiter also wrote I. G. Farben—producer of almost all of Germany's food dyes—and asked the company to stop producing butter yellow;¹⁶⁴ archival evidence and postwar reports indicate that they complied.¹⁶⁵

Reiter's goal by this point was to get at least half of all colorings removed from German foods, but it is unclear how close he came to achieving this. We do know that his office in 1940 and 1941 spent 48,000 RM investigating food colorings for possible cancer hazards, a fairly substantial sum;¹⁶⁶ we also know that he continued meeting with makers of bread, candy, cheese, marzipan, ice cream, and soft drinks to dissuade them from using colorings—and often got concessions.¹⁶⁷ He met with liquor producers and restaurant reps, and debated whether housewives should be allowed to purchase colorings for use at home. He even answered queries from the military, which had begun to worry that some of their synthetic spices and fragrances might be carcinogenic—especially artificial pepper (*Cinnamylacrylsäurepiperidid*: don't ask me for a translation), but also artificial pimento, nutmeg, cinnamon, and cardamom. Reiter ordered that synthetic aromas be sold only in tiny packages, to discourage overuse; he also devised warning labels stating that suspect agents (e.g., artificial bitter almond) should not be used in undiluted form. He recommended that natural colorings like caramelized sugar or honey be used whenever possible, and asked the NSDAP's Public Health Office to help him replace synthetic dyes with plant-derived colors like carotene oil. It was important in this time of "total war," he said, for people to believe their food supply was safe.¹⁶⁸

Reiter, though, was clearly disappointed by the pace of progress in the dye-ban campaign. Research efforts suffered a setback in June of 1943, when the animal laboratories of the Reich Health Of-

fice were destroyed in an Allied bombing raid.¹⁶⁹ In November of 1944, Reiter petitioned the Plenipotentiary for Total War Mobilization to ban all food dyes; German factories were still producing more than three hundred metric tons of food colorings every year—enough to fill an entire freight train—and Reiter argued that a ban would make military sense, given that the chemicals and labor freed up by such a ban could be used for more war-worthy pursuits. Reiter also knew, though, that the whole question of food dyes was receding in the face of deeper problems—like starvation—especially since many of the items in question (colored crab soup or tomato sauce, for example) were no longer available in any form—colored or not. Some Nazi leaders by this time had already taken matters into their own hands: the Reichsstatthalter for the Oberdonau region, for example, in December of 1941 had issued his own ban on butter yellow; Württemberg's interior minister defended such bans as helping to win the war.¹⁷⁰

Protests against the use of dyes by influential German doctors continued throughout the war. Johannes Kretz in 1944 published a strong attack on German food dye policy, protesting the fact that little had been done to curb their use despite incontrovertible evidence of a cancer hazard. Kretz warned that since some people were especially sensitive, and that "even the tiniest" exposure could cause cancer, it was better to play it safe and ban the use of azo dyes in foods altogether.¹⁷¹ Karl Heinrich Bauer that same year compared the continued use of butter yellow to a "mass human experiment":

One often hears a food chemist or some other expert stating there is "no evidence of harm" from a given substance. Today, after thirty years of cancer research, we are dubious of such claims. Experiments can be performed to reveal or disprove a cancer hazard. Look at X-rays, or aniline dye, or scarlet red, or countless other carcinogens, and what you see is that all were assumed to be harmless until the human experiment we call "occupational cancer"—on a massive scale, and after a long period of latency—proved the reality of a cancer threat. . . . Heil Hitler!¹⁷²

Bauer's remarks show that influential German physicians were sensitive to the dangers of human experiments "on a massive