tressing winter spent there by the Continental Army brought forth no complaint on the score of sugar. Yet they had little or none. It seems that Washington's contemporaries looked upon sugar not as a food but as a condiment, and one of which they were not sufficiently fond to deplore its absence.

This apparently is borne out by the fact that the per capita consumption of sugar in the United States in 1791 was only seven and a half pounds a year. The consumption of sugar has risen steadily ever since, until in 1941—the last "normal" year before rationing—it reached 114.1 pounds per capita. If syrup, candy, and corn and maple sugars are included, the figure is 129.6 pounds.

It is a usual assumption that the increase of sugar in the diet has been paralleled by a decrease in the use of fats, and this is probably true. Still, it is possible that what has actually taken place is not so much a decrease in the popularity of fats as a decrease in the attractiveness of certain words used for fats, among them the terms fat, grease, and tallow. The same person who tells you he dislikes fat may add that he is very fond of butter, cream, and bacon. The man who tells you he dislikes beef fat may be fond of beef gravy and of suet pudding. In fact, many find that the expression "rendered beef suet" does not have a disagreeable connotation but that "beef tallow" does; yet the two expressions are synonymous.

The word blubber, even though you have never tasted blubber, or spoken with anyone who has, will likely give you a feeling of revulsion. But on trial, particularly if you are one of those who would rather eat cream than butter with a spoon, you would prefer some blubbers to any butter. To me, the fresh blubber of the bowhead whale, and of the other whales with which I am familiar, is reminiscent of fresh cow's cream, with a barely perceptible suggestion of walnut flavor. Nor am I peculiar in this. For instance, when Dr. Elisha Kent Kane, famous polar explorer, discovered that seal and whale blubber tasted delicious he protested: "Oh, call it not blubber!" He felt that the trouble was not with the thing itself but with the name.

In a study of food tastes it comes out that people like what they are used to. It may have been poverty, or a desire to set money aside for a rainy day, that has induced parents to feed their children so largely on bread, potatoes, porridge, cake, jam, syrup, and sugar; but it is what many Americans have grown up on and they are the victims—or the beneficiaries, if you prefer—of established food habits according to which they like these cheap things because they are used to them. Not only that, there is a strong emotional bias in their favor as, in the popular opinion, the right food, good food, American food.

According to the Associated Press, the Committee on Food Habits of the National Research Council in 1944 reached the usual conclusion which, however, they state in an unusual phrase. Instead of repeating the hackneyed "You like to eat what you are used to eating," they say "People like what they eat rather than eat what they like."

While cheapness may create a liking for an article of food, through the establishment of a habit that derives from economy, there is also another and reverse tendency to favor a thing because it is costly, where you have the full application of Thorstein Veblen's "Doctrine of Conspicuous Waste." We all know people who serve strawberries in January more frequently than in May and June, even though it is common experience that berries imported from afar, as out-of-season luxuries, are seldom of as good flavor as the neighborhood product is when in season. Here the desire to show off triumphs over the combined motives of economy and flavor.

Fat, a word now under a strong taboo complex of feelings, we do not eat if we can help it. However, this means only that we do not eat the things which we call fat. We do not eat tallow under the name of tallow; but we love beef gravy which may be largely tallow. We trim the fat off our steaks and leave it behind on the plate, not wholly or mainly, as Veblen might have diagnosed it, in order to distinguish ourselves by conspicuous wastefulness; rather we do it because this part of our steak comes under the taboo name of fat, for which reason we have avoided it from childhood, have scarcely ever tasted

it, and are sure we do not like it. Meantime we compensate by eating a lot of fat under its agreeable names of cream, butter, bacon, gravy, shortening, and salad dressing.

III

STILL, in spite of all taboos, there is a widespread understanding that fat hunger is not only possible but normal. At one stage of the present war we were trying to talk ourselves into various beliefs about the weakness of Germany; then it was frequently alleged that the Nazis were suffering from fat hunger, which condition would help in bringing them to their knees. Later we heard about fat hunger in occupied countries, from Norway south, and not least in the Balkans and Greece. To this degree, at least, and in spite of the common belief that fat is more necessary in cold than in warm weather, we realize generally that fat is desirable whatever the climate.

Except as tastes are controlled by propaganda and fashion, the longing for fat, summer or winter, depends on what else you eat. If yours is an exclusive meat diet, then you simply must have fat with your lean; otherwise you would sicken and die. On a mixed diet, since fats, sugars, and starches are in most practical respects dietetically equivalent, you eat more of any one of them if you decrease the combined amount of the other two.

Among hunting people, the chances of fat hunger increase as you go toward the Equator; for the animals on which they depend get more and more skinny as you work south, until in places like tropical Africa there are only a few species that accumulate fat, chiefly the hippo and the eland. Quite naturally, therefore, we get from central Africa and northern Australia the most extreme stories of fat hunger.

ONE of the most reliable and competent authorities on the tropics whom I have known personally is Sir Hubert Wilkins. When we were in the Arctic together, both living at times exclusively on meat, he gave me what remains my best single instance of how fats are crowded out.

Sir Hubert's father, the first white child born in South Australia, told that when he was young, around 1840, the herdsmen, who were the majority of the population, lived almost exclusively on mutton (sometimes on beef) and tea. At all times of year they killed the fattest sheep for their own use; and when in the open, which was frequently, they roasted the fattest parts against a fire with a dripping pan underneath, later dipping the meat into the drippings as they ate.

Then gradually commerce developed, the use of breads and pastries increased, jams and jellies were imported or manufactured and, with the advance of starches and sugars, the use of fat mutton and fat beef decreased. Now, except that the Australians eat rather more meat than people do in the British Isles, the proportion of fat to the rest of the diet is probably about the same in Australia as elsewhere within the British Commonwealth of Nations.

We usually think of Sir Hubert as an Antarctic and Arctic explorer, which is right. But he is also distinguished for his tropical research through the two-year expedition he conducted for the British Museum in northern Australia, as told in his book *Undiscovered Australia*.

Long before Wilkins, the Swedish explorer, Carl Lumholtz, was in tropical Australia. He reported at that time that the natives ate their meals on the principle children apply when they raid a cupboard—they used up the best things first and did not eat anything but meat whenever they had enough meat; and the fatter the meat the better. This Wilkins confirmed, and added certain observations along the same line.

Wilkins found that the missionaries were having some trouble in breaking the natives of cannibalism, and that the difficulty was serious in proportion to the fatness of the deceased. When an emaciated man died, little was needed beyond a stern admonition; but when a corpulent man was buried, they had to stand watch over the grave, and corpses sometimes disappeared weeks and months after burial. Seemingly the natives liked their cadavers about as high as the English like their game and the Norwegians their cheese, or at least did not mind their getting that way if they were fat enough.

ANOTHER sidelight on tropical fat hunger comes from a medical missionary, Dr. G. W. Harley, who has been in Liberia most of the time since 1926, when he founded there the Ganta Mission of the Methodist Church, of which he is still superintendent. Dr. Harley wrote: "My own experience [in the tropics] for twenty years has been that of a person very active physically, consuming meat whenever available in amounts comparable to that eaten in temperate climates. It was not unusual for us to put up a whole hog in tin cans for our personal use. . . .

"On returning to the United States, I arrived during a heat wave, and hungrily devoured fat pork and country sausages in Washington, D. C.—was disappointed when I could not get sausages with pancakes in Boston because it was 'too hot for sausages.' . . .

"Men who work in hot places (stokers) do not avoid meat and fats, rather the opposite."

Such are the views of a doctor of medicine with long experience of the humid tropics. We turn from him to George H. Seybold, distinguished for success in the tropics as a business man rather than a scientist, who spent six years in the Philippines teaching school, more than a decade in Sumatra representing the U. S. Rubber Company, and then six years in Liberia for the Firestone interests. He came to believe, and to act on the belief, that much of the so-called enervating effect of a tropical climate is due to malnutrition. In the case of whites he believes the "enervation" is traceable to faulty theories of diet which physicians and others bring with them—particularly the theory that you should go light on meat in hot weather, and that if you do eat meat it should be lean.

Mrs. Seybold believes in varying meals a good deal, but allows her husband considerable fat meat. When she is away from home he has only two meals a day, noon and evening. At both he eats pork chops two inches thick, with at least three quarters of an inch of fat all the way around the outer edge of each. During one absence of his wife's, every meal he ate for six weeks consisted of these chops.

In the United States Mr. Seybold has trouble getting food he likes at restaurants —the pork chops they serve are not thick enough nor fat enough.

Another believer in fat meats for tropical use is Earl Parker Hanson, who bases his view on four years as an engineer with a mining company in sub-tropical Chile, two years as an explorer of the Orinoco and Amazon basins for the Carnegie Institute, and several tropical years spent in Puerto Rico and elsewhere.

It seems Hanson retained throughout his first six years in the tropics the usual North American beliefs about South American food, to the effect that the local people were pretty well all wrong and that New York and London knowledge of dietetics enables us to devise regimens better suited to the humid tropics than what the people of those tropics were eating, and liking to eat. When he was at last gradually converted from this view he also began to learn, through what eventually became a wide reading of tropical literature, that others before him had arrived at the same conclusions by similar steps—but, of course, without influencing the prevailing dietetic theories of North America and Europe, which, in the main, are deduced from animal experimentation and from chemical facts, the matter of their applicability to humans being rather too easily taken for granted.

There was, for instance, Henry Wallace Bates, friend and contemporary of Darwin, who spent about eleven years living in and traveling all over the Amazon basin. In his book, *A Naturalist on the River Amazon*, one of the great classics of tropical exploration, he said:

"I had found out by this time that animal food was as much a necessary of life in this exhausting climate as it is in the north of Europe. An attempt which I made to live on vegetable food was quite a failure."

IV

THERE was in Washington, in the spring of 1943, a controversy within the Army as to whether pemmican, made from dehydrated lean beef steak and rendered beef suet, should be used as a military ration, or as an element in one. The chief argument against its use, except for the al-

legation that soldiers would not like it, was that, because of a high fat content (80 per cent of calories from the suet, 20 per cent from the lean) it was not an all-climate ration, but one useful only in cold weather, thus good only half the year in the temperate zone and no good at all in the tropics.

At this time Hanson was one of the resident tropical advisers of the Quartermaster General. From his own experience in the humid tropics, from the verbal reports of fellow explorers whom he met in the Explorers Club of New York and elsewhere, and from his reading of tropical literature, he was convinced that the high fat content of pemmican was no argument against its use in hot weather. He felt that if it was a good food in the Arctic it would be equally good in the tropics. So he decided to try it out through a part of the Washington summer, where the maximum temperatures of June, July, and August are demonstrably higher and, in Hanson's opinion, more discomforting than, for instance, at Manaos on the Amazon. In his report, dated February 29, 1944, Hanson said:

"My experience with pemmican grew out of the personal conviction that meat—including the proper amount of fat—is every bit as necessary for health and energy in the tropics as in the North. I have long wondered about the glaring discrepancies in the nutritionists' arguments to the contrary. On the one hand they say that fat is the most efficient energy food known; on the other they talk in doleful tones about the 'debilitating' effects of the tropical climate. Why you should be careful to avoid energy-giving foods in a climate that supposedly saps your energy is beyond me.

"My first personal experience with fat shortage came on my Orinoco-Amazon expedition of 1931–33, when my canoe Indians practically went on strike because I hadn't included sufficient lard or other fat in my supplies. Almost every newcomer to the Orinoco runs into that situation; his Indians make sure, before starting a journey, that he has with him plenty of fats.

"I bought enough fat to please my Indians, and then proceeded to eat on the journey from a separate pot, because I 'couldn't stand their greasy food.' It wasn't many weeks, however, before I avidly grabbed at every turtle egg I could get hold of—for its rich oil as I now realize—and at every Brazil nut, avocado pear, and every other source of vegetable fat, when I couldn't get animal fats. In those days I did not correlate that craving with my food tastes and habits; now I do. If today I were to go on another extended journey through the Amazon basin I would either take pemmican with me from the United States or spend some time, first of all, making it down in Brazil.

"Recently a lady ethnologist told me that I was all wrong in my claim that any healthy white man can stay in perfect health (as far as food alone is concerned) on any diet that keeps native populations and 'primitive' peoples in health. She said she had tried it for a number of weeks in Mexico, with almost disastrous results. But when I asked her if she hadn't had trouble adjusting her taste to the 'greasy' food of the Mexicans, she stipulated that 'of course' she and her companions, while eating 'exactly what the Mexicans ate,' has taken pains to prepare the food in an appetizing way, by leaving out the grease! Then she went on to describe her own subsequent troubles in the typical terms of fat shortage: constant hunger, a vague discomfort, lack of energy, distended stomach, etc."

During Hanson's Washington test there were available three kinds of pemmican, differing only in their proportions of lean and fat, the A-type deriving 80 per cent of its calories from fat; the B-type, 70 per cent; the C-type, 60 per cent. Although Hanson at this stage was thoroughly convinced of the equal suitability of fat in hot and cold weathers he himself had never eaten a high fat diet at any season, his convictions on this point having developed after he left the Amazon-Orinoco region, when he was analyzing the results of his expedition. Accordingly he started the Washington tests on C-pemmican, living exclusively on that, with sugarless tea, hot or iced. On this ration he soon noticed a discomfort, a sort of unsatisfied longing, which he thought might be due to an insufficiency of fat. This proved correct; for when he shifted to the A-type pemmi-

can, with its 20 per cent higher fat content, the discomfort vanished.

Pemmican, as invented by the North American Indians of the plains and used in the fur trade of the midwestern parts of the United States and Canada, was made of uncooked, sun-dried lean, which was powdered and mixed with rendered suet. But the lean element of Hanson's pemmican was beef which had been cooked before it was dried. It seems clear, from the records of the fur trade, that scurvy did not occur with pemmican made from sun-dried meat, but it appeared likely this trouble would develop with the cooked pemmican; so Hanson used Vitamin C pills as the only addition to the exclusive regimen of pemmican and sugarless tea.

HANSON reports that during the first five days on exclusive pemmican he had not merely the typical discomforts due to lack of fat, but other slight discomforts as well. He was used to bulky meals and was now living on food so condensed that his entire ration for 24 hours weighed only three quarters of a pound and would no more than fill an ordinary water tumbler. There was a hollow feeling which he appeased by drinking large quantities of water. On about the fifth day his stomach became reconciled to the lessened bulk, and the excessive drinking was cut down to what seemed less than it would have been with an ordinary mixed diet.

There was also a bit of psychological trouble. Hanson was surrounded by dietitians who explained to him (in part on the basis of a statement issued by the National Research Council) that it was inadvisable to attempt getting more than 35 per cent of one's calories from fat, and that health could not be maintained above a certain limit, which was variously stated at 40, 50, and 60 per cent from fat. Since he was deriving 80 per cent of his energy units from fat it seemed he was bound for trouble. He may have been sort of hypnotized into a fear that the dietitians might be right. However, he got over this within the first few days.

These beginner difficulties solved, Hanson enjoyed his all-pemmican diet and remained at a high level of physical and mental fitness to the end of the seventh week. It then seemed to him that no scientific advantage would be gained by continuing the regimen longer.

From this experience, Hanson was strengthened in the belief that the so-called tropical enervation, which has been blamed by Europeans commonly upon the equatorial weather, is largely the result of faulty nutrition, caused by subservience to the current doctrine that in hot weather we should eat little meat and that what little we do eat should be lean. So when he was chosen in 1944 by the Foreign Economic Administration to head a mission for a two-year stay in Liberia he took with him supplies of pemmican, for the use of his family and for introduction to the whites and natives of those tropics.

ADMIRAL Sir Leopold McClintock, the famous British polar explorer, was called before an inquiry into the poor health conditions on an expedition which had been commanded by Sir George Nares. In his testimony he said that on his own expeditions, which had always enjoyed excellent health, he had made it a practice to pay no attention to the prohibitions of a dietetic theory, which happened to be in vogue among the doctors in a given year, if he knew that the food condemned by the theory had been found wholesome and in other ways desirable by large numbers of people through long periods. He considered it wisdom to prefer experience to theory whenever the two were in conflict.

We might, perhaps, in giving our adherence to the McClintock rule, suggest a corollary. It is that when a precept of the dietitians—like the one against fat in warm weather—is in conflict with the tastes and practices of many people in many countries through many centuries, then it is likely the dietitians themselves will eventually learn, through animal experimentation or by deduction from chemical fact, that the opposite of their precept is true.

So we may reasonably expect, within not too many years, that the dietitians will announce they have discovered Jehovah was right for Palestine, Achilles for Greece, the Australian black and the Amazonian Indian for the humid tropics, in liking meat in those climates and in liking it fat.

MISS PERCY'S WAR

A Story

NEAL GILKYSON

Miss Percy had been in Washington for two and a half years, and as time went on she loathed it with a more persistent, stricken despair. She felt as though she had spent this time tunneling into dark, underground chambers. She told herself her life was a joyless death.

Miss Percy, who was not yet thirty, worked for the Intelligence Service of the Army Air Corps. She worked, furthermore, in a vast, dim cavern of brown linoleum and cream-colored walls in the center of the second floor of the Pentagon Building. It was there that she was unhappiest. The difficulty seemed to be that it was a philistine world. Neither the people she worked with nor the papers on her desk spoke her language.

Of the two dozen men in her office almost all had come to the Army fresh from selling insurance or manufacturing toothpaste. They read the funny papers, joshed the secretaries, and kept bottles of whisky in their desks. Only two were Regular Army men. One was old Major Carpenter, a relic of the last war, shuffling and vague. He was the anecdotal type. "My wife asked me the other day if I still loved her as much as when I married her," he would say cheerfully to any passer-by. "I says to her, 'Well, I must love you twice as much—you weigh twice as much.'"

The Major was highly regarded by the others. He set the conversational tone.

The other Regular was Colonel Freeman, chief of the entire office. He was impressive because he was young—people said around thirty-five—precise, fierce, and highly vocal. He pleased Miss Percy by being the only officer in the unit who dressed with any style, but he horrified her by the devotion to work that he demanded. As unit chief he sat in an inner office, but when he made an appearance among his staff he came exploding epithets, his small neat figure shaking with rage.

"God damn it to hell, Carpenter! Why didn't you count in half the probables in this number of destroyed? I've got G-2 on the phone now yelling bloody murder. Want me to tell General Arnold he's a bastard?" Miss Percy understood the Colonel was the youngest unit chief in the A-2, and she could see why he had got where he had.

Miss Percy had qualified herself to come to Washington by having lived in Germany with her parents from the time she was twelve till she was sixteen. In the fall of 1942 she did not go back to the girls' school in which she was teaching German; she came to Washington instead. She came full of hopes of either winning the war or finding a glorious husband in uniform or both.

At the end of her first tedious year she discovered that neither of these hopes remained. The men had been old and inglorious when she first saw them; now they were older.

All day long she translated pieces about airplane engines, perimeter tracks, and high-altitude sickness, and her imagination was not captured. She never knew what happened to the pieces she put in her OUT basket. She was not liked, and she was let respectfully alone.

This was the world Miss Percy worked in, and it was alien corn. So perverted were its values that the dreary technical details of war were placed above everything else; the only important thing was a vacuous good nature. What she considered her aesthetic tastes found such a world grotesquely wrong and fantastic. She came with her heart on her sleeve and she was snubbed.

THERE was one moment of Miss Percy's day, however, in good weather and when luck was with her, when she was at peace with herself and her world.

This was in the winter, when she saw the sun rise on her bus trip to work in the early morning, and in the spring and fall when the morning light was fresh. This was a bright and expansive moment indeed, and during a large part of the year it was her only look at the sun for the day. All winter she rose and dressed in the darkness of her apartment in the morning, disappeared into the cavernous halls of the Pentagon during the day, and emerged again into the last waning flicker of twilight.

Her day really opened with a five-minute walk through the chill dawn to the corner of 20th and C, where the Pentagon busses started. Miss Percy took seriously the matter of getting a seat in the crowded bus, and she developed considerable skill at it. She looked for the bus starter on the corner, for where he stood the first empty bus pulled up. Then she divided the distance from him along the curb into hypothetical bus lengths, figured where the third bus door would open, and worked her way firmly to that spot on the curb. If her calculations were not correct enough to enable her to get a seat by the window on the left side, she would get off again and wait for the next one to come.

Once safely in her seat she put her elbow on the window sill, fastened her eyes on the east, and simply stared, with all her senses open.

The bus rolled away from the built-up section of C Street and headed into the park. As it drove past the Munitions Building, which stood in the middle distance, it came to the first stretch where the horizon was visible. And there, on certain winter mornings, was the sun. It climbed over the horizon, with dignity and solemn poise, shedding an orange light around it, making the scrubby little trees seem like black matches. But it was on the bridge across the Potomac that the view was at its unobstructed best. The river stretched away as far as the eye could see, a path of reflected sunlight running brightly down its middle. The universe was like a newly washed face. Spaces and freedoms were in the sky, and hope and strength were on the earth. Sometimes an airplane would fly right out of the sun, or underneath it, or on top of it, a swooping black dot coming toward the bus, skimming steadily and lightly on air. Then the symbolism of its play among fields of light was almost more than she could bear.

It would be difficult to overestimate the importance of this early morning spectacle to Miss Percy. She made of it a small emotional orgy. It was the only drama her present life provided in which the tensions were kindly and anonymous, and not directed against her.

She privately wished daylight farewell on the last lap of the trip, and when the bus drove into the underground terminal of the Pentagon the abrupt transition from light to darkness was final. By the time she emerged from the bus into the marble concourse of the building she was no longer even mourning the immediate past. She walked toward her office, accompanied by her nagging sense of being unhappy, unsuccessful, and misunderstood. Thus she met her failure every morning, and stifled it with hatred.

ONE day in February Miss Percy gathered her resolve, as she did about every two months, to ask for a day off.