



# *Eating for Sound Teeth*

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RECENTLY A LETTER FROM DR. PAULINE BERRY MACK OF PENNSYLVANIA STATE COLLEGE SAID THAT BUDDIE AND JIM CANAN, 18 AND 16 YEARS OF AGE, HAD RATED AS "BEST" OR FIRST CLASS, IN ALL THEIR NUTRITIONAL STATUS TESTS. DR. MACK HAD BEEN WORKING FOR THREE YEARS DIRECTING TESTS ON PENNSYLVANIA SCHOOL CHILDREN IN AN EFFORT TO DETERMINE THE STATUS OF NUTRITION IN THE STATE AND ITS EFFECTS ON GROWING CHILDREN. AMONG MORE THAN 2,000 CHILDREN EXAMINED, THESE TWO ALONE HAD RATED AS BEST IN EVERY TEST — WEIGHT, MUSCLE TONE, TEETH, BLOOD, EYES, AND OTHERS. "THEIR SCORES ARE THE NEAREST PERFECT OF ANY WE HAVE EVER TAKEN IN OUR LONG NUTRITION STUDY," DR. MACK WROTE.

THE STORY OF THESE TWO BOYS SHOWS HOW AN INTELLIGENT AND CONSCIENTIOUS MOTHER TRIED TO COMBAT WHAT MANY PEOPLE WOULD STILL CALL AN IRREPARABLY BAD DENTAL HERITAGE. OTHER MOTHERS MAY DUPLICATE THIS ACCOMPLISHMENT WITH THEIR OWN CHILDREN IF THEY ARE WILLING TO USE THE INTELLIGENCE AND PATIENCE MRS. CANAN USED WITH HERS.

TWENTY YEARS AGO AN ATTRACTIVE YOUNG NEIGHBOR OF MINE WAS GETTING READY TO BE MARRIED TO ONE OF OUR HOME TOWN BOYS WHO HAD BEEN AN AVIATOR IN FRANCE FOLLOWING HIS GRADUATION FROM HARVARD IN 1915. AS PART OF HER PREPARATIONS, SHE HAD SOME BADLY NEEDED DENTAL WORK PERFORMED. EXAMINATION OF HER MOUTH SHOWED THAT, AT 21, SHE HAD ONLY SEVEN OF HER ORIGINAL SIXTEEN UPPER TEETH LEFT. TWO OF

HER LOWER MOLARS HAD BEEN EXTRACTED. THE NECESSARY PRECISION ATTACHMENT REMOVABLE BRIDGE WAS PROVIDED FOR THE UPPER JAW, AND THE ESSENTIAL RESTORATIVE WORK WAS DONE BELOW. LATER, SIXTEEN INLAYS WERE INSTALLED IN HER HUSBAND'S MOUTH. THEY WERE A PAIR, DENTALLY SPEAKING! THE DENTAL CONDITIONS IN EARLIER GENERATIONS OF BOTH THE BRIDE'S AND GROOM'S FAMILIES INDICATED POOR, IF NOT EXTREMELY BAD "DENTAL INHERITANCE."

WHAT I TOLD MY YOUNG NEIGHBOR IN THOSE EARLY TALKS WAS BASED, FOR THE GREATER PART, ON NUMEROUS CONFERENCES WITH DEAN EDWARD C. KIRK OF THE UNIVERSITY OF PENNSYLVANIA DENTAL SCHOOL. THIS WAS BEFORE THE DAYS OF VITAMIN KNOWLEDGE AS SUCH — KNOWLEDGE THAT HAS MEANT SO MUCH IN BUILDING BETTER BODIES FOR MODERN CHILDREN. KIRK, IN 1911, SAID THAT HE HAD RAISED FIVE CHILDREN, AND AS LONG AS HE HAD CONTROL OF THEIR FOOD HABITS THEY DID NOT HAVE DECAYED TEETH. HE SUGGESTED PICKERILL'S "PREVENTION OF DENTAL CARIES AND ORAL SEPSIS" BE READ. THAT BOOK CONTAINED THE FUNDAMENTALS OF BUILDING SOUND TEETH BY STRESSING THE FACT THAT A VARIETY OF FOODS — FATS, PROTEINS, CARBOHYDRATES AND MINERALS — SHOULD BE TAKEN DAILY.

THE VARIETY OF RECOMMENDED FOODS INCLUDED MILK AND MILK PRODUCTS, FRESH VEGETABLES, FRUITS, MEAT IN MODERATION, THE NATURAL WHOLE GRAIN PRODUCTS AND NATURAL SWEETS. MRS. CANAN WAS NOT ONLY A YOUNG WOMAN WITH INTELLI-

GENCE TO GRASP INFORMATION ABOUT FOOD AND ITS RELATION TO SOUND HEALTH, BUT SHE HAD THE STRENGTH OF MIND AND CHARACTER TO EDUCATE HERSELF FURTHER AND THEN TO USE HER JUDGMENT AND PERSEVERANCE DAY BY DAY TILL GOOD FOOD HABITS IN HER HOME BECAME SECOND NATURE.

BY THE TIME BUDDIE WAS BORN IN 1924 MRS. CANAN NOT ONLY WAS MAKING FAR GREATER USE OF FRESH FRUITS AND VEGETABLES THAN WAS CUSTOMARY IN THE USUAL AMERICAN HOME, BUT SHE HAD MADE IT A RULE TO SERVE ONLY BREAD BAKED FROM WHOLE GRAIN FLOUR. THIS MEANT SHE BOUGHT THE WHOLE GRAIN FLOUR AND DID HER OWN BAKING, FOR IN THOSE DAYS IT WAS NOT EASY TO BUY BREAD THAT DID NOT CONTAIN CONSIDERABLE ALL WHITE, OR PARTLY MILLED FLOUR. THE USUAL SO-CALLED "WHOLE WHEAT" BREAD OBTAINABLE IN AMERICAN STORES HAS BEEN FAR FROM "WHOLE" WHEAT, AS EXAMINATION OF THE LABEL REVEALS.

ONE FACT THAT KEPT MRS. CANAN GOING IN THE EARLIER DAYS OF HER EXPERIMENT WAS THAT HER OWN TOOTH DECAY PRACTICALLY DISAPPEARED. SO WHEN BUDDIE, AND LATER JIM, SHOWED A SMALL CHILD'S REBELLIOUSNESS ABOUT FOOD, SHE HAD THE GOOD SENSE NOT TO BLAME IT ALL ON THE FOOD. SHE REALIZED SHE WAS NOT HAVING ANY MORE DIFFICULTY IN TRAINING TWO SMALL BOYS TO EAT THE DIET SHE HAD SELECTED FOR THEM THAN MANY OTHER MOTHERS WERE HAVING WITH THE TYPES OF FOOD THEY HAD SELECTED FOR THEIR CHILDREN. SHE STUCK BY HER GUNS TILL GOOD FOOD HABITS WERE FORMED.

IN FACT, AFTER THESE GOOD HABITS WERE FORMED MRS. CANAN HAD AN EASIER TIME THAN MANY OF HER NEIGHBORS. BECAUSE HER CHILDREN HAD FULL NUTRITIONAL VALUE IN EVERY BITE THEY ATE, THEIR HUNGER WAS SATISFIED AND NOT JUST SUPERFICIALLY APPEASED. SHE NEVER EXPERIENCED THE DIFFICULTY OF HAVING TO KEEP HER CHILDREN FROM EATING TOO MUCH CANDY. SHE IS STILL SOMEWHAT AMUSED WHEN MOTHERS ASK HER, "BUT HOW DID YOU KEEP THEM FROM GORGING WITH CANDY WHEN THEY WERE AWAY FROM YOU?" WHEN BUDDIE AND JIM CAME HOME FROM SCHOOL THEY GRAVITATE TO FIGS AND ORANGES AS SPONTANEOUSLY AS OTHER CHILDREN GRAVITATE TO CANDY AND COOKIES.

SINCE MRS. CANAN'S PROCEDURE WITH HER BOYS WAS BASED ON HER OWN DECISIONS AFTER DISCUSSION WITH ME PLUS HER OWN READING AND THOUGHT, I WILL LET HER TELL YOU EXACTLY WHAT SHE DID TO GIVE HER BOYS THE MAGNIFICENT DENTAL AND BODILY EQUIPMENT THEY HAVE TODAY.

"I GAVE THEM MILK, ORANGE JUICE AND COD LIVER OIL FROM BIRTH," SHE SAYS. "AT 2 MONTHS THEY WERE GIVEN SMALL AMOUNTS (HALF A TEASPOONFUL) OF THE JUICE OF RAW VEGETABLES — CELERY, BEET TOPS, TURNIP TOPS, SPINACH AND CARROTS BEING THE MAIN ONES. THIS WAS GRADUALLY INCREASED TO A CUPFUL OF JUICE WHEN THEY WERE 5 MONTHS OLD, AND THE CUPFUL CONTINUED UNTIL THEY WERE OLD ENOUGH TO CHEW RAW VEGETABLES.

"AT 3 MONTHS I BEGAN TO GIVE THEM COOKED VEGETABLES — A TEASPOONFUL EACH DAY TO START WITH UNTIL THEY GRADUALLY TOOK A LARGE DESERT DISH OF STRAINED COOKED VEGETABLES AT 6 MONTHS. AFTER A TIME I DISCONTINUED STRAINING THE SOFTER VEGETABLES, SUCH AS COOKED CARROTS, BAKED POTATO AND SPINACH. THE STRINGY TYPES — CELERY, CELERY LEAVES, ONIONS, CABBAGE, TURNIP TOPS AND SO ON — HAD TO BE STRAINED FOR ABOUT A YEAR UNTIL THE BOYS HAD SUFFICIENT TEETH TO CHEW WITH. POSSIBLY I SHOULD MENTION THAT 'COOKED' VEGETABLES MEAN STEAMED VEGETABLES IN OUR HOME. I ALWAYS STEAM THEM IN PATAPAR PAPER. THE ONLY BOILED VEGETABLE I HAVE EVER SERVED IS CORN ON THE COB.

"LARGE QUANTITIES OF RAW FRUITS WERE GRADUALLY ADDED, AND CRUSHED BERRIES OF ALL KINDS. AT 8 OR 9 MONTHS I BEGAN GIVING THEM HARD TOAST MADE OF WHOLE WHEAT FLOUR, MILK, BUTTER AND HONEY. THAT WAS — AND STILL IS — THEIR ONLY CEREAL. FIGS, DATES, RAISINS, MAPLE SUGAR AND HONEY HAVE BEEN THEIR ONLY SWEETS. THEY EAT EGGS (THE YOLKS ONLY) ABOUT THREE TIMES A WEEK, LIVER ONCE A WEEK AND MUSCLE MEAT ONCE A WEEK.

"THEY EAT LARGE QUANTITIES OF RAW GREENS EVERY DAY — LETTUCE, SPINACH, CABBAGE, CELERY — WITHOUT DRESSING OF ANY KIND. THAT'S THE WAY THEY LIKE THEM. USUALLY I BUY A POUND OF LETTUCE OR SPINACH FOR EACH OF THEM. WHEN BUYING CELERY I HUNT FOR THE LARGE GREEN STALKS AND BUY A STALK FOR EACH BOY. THESE RAW VEGETABLES, WITH ONE COOKED VEGETABLE SUCH AS CORN, BAKED POTATO, STRING BEANS OR PEAS, PLUS WHOLE WHEAT BREAD AND MILK, MAKE THEIR USUAL MEAL. THEY EAT LOTS OF BUTTER AND DRINK LARGE QUANTITIES OF MILK. THEY EAT A GREAT MANY FRUITS, TOO — BANANAS, ORANGES, PEACHES AND TOMATOES."

BY SERVING LIVER ONCE A WEEK MRS. CANAN WAS GIVING HER FAMILY MEAT VALUES IN SOME WAYS IN EXCESS OF SEVERAL SERVINGS OF MUSCLE

MEATS. ALSO, IT SHOULD BE REMEMBERED THAT MILK IS AN ANIMAL PROTEIN. SHE WAS ALSO MAKING AMPLE USE OF THE VALUABLE PROTEIN ELEMENTS FOUND IN NATURAL, UNPROCESSED WHEAT — A DIETARY MEASURE WHICH PROVED SO EFFECTIVE IN EUROPE DURING THE FIRST WORLD WAR.



In the case of Buddie and Jim, emphasis on nutrition for dental health has resulted in superb physical condition!

THE MAIN THING IS THAT SHE HAD INCLUDED ALL THE NOW KNOWN CONSTITUENTS FOR PERFECT TOOTH BUILDING BEFORE MUCH WAS KNOWN OF THE VITAMIN CONSTITUENTS. FOR PERFECT TEETH THE BODY NEEDS NOT ONLY CARBOHYDRATES, FATS AND PROTEINS BUT A LIBERAL SUPPLY OF ALL THE PROTECTIVE FOOD FACTORS TO INSURE ADEQUACY — IN BOTH QUANTITY AND VARIETY — OF THE MINERALS AND VITAMINS. WITH ORANGES AND TOMATOES (SOMETIMES FRESH RAW CABBAGE) SHE INSURED HER BOYS THEIR DAILY SUPPLY OF VITAMIN C. THE COD LIVER OIL, ALSO GIVEN DAILY (THEY LICK IT UP WITH A RELISH OF YOUNG ESKIMOS, TOO), SUPPLIED VITAMIN D, WHOLE GRAIN PRODUCTS SUPPLIED THE B FAMILY, WHILE THE GREENS GAVE AN ABUNDANCE OF ALL OF THE PROTECTIVE FOOD FACTORS. THE AMPLE PRESENCE OF WHOLE WHEAT AND MILK AND THE VARIETY OF FRUITS AND GREEN VEGETABLES, EITHER RAW OR STEAMED, MEANT THAT SUFFICIENT MINERALS OF ALL KINDS FOUND THEIR WAY DAILY INTO THE BLOOD STREAM, EVEN IN A COUNTRY WHOSE FOODS ARE NOW OFTEN GROWN ON DE-MINERALIZED SOILS.

WE DENTISTS DO NOT YET KNOW THE LAST ACCURATE WORD ON TOOTH DECAY, BUT WE DO KNOW THAT PERFECT TEETH CAN BE STIMULATED BY PROPER NUTRITION, AND DECAY CAN BE DECREASED. WE ALSO KNOW THAT PEOPLE WILL HAVE TO DO THIS

FOR THEMSELVES. IT CANNOT HAPPEN IN A DENTIST'S OFFICE.

NEITHER BUDDIE NOR JIM HAD A SPOT OF DECAY ON HIS BABY TEETH. UP UNTIL A FEW MONTHS AGO NEITHER ONE HAD A SPOT ON HIS PERMANENT TEETH. THEN BUDDIE DEVELOPED SEVERAL SPOTS OF SUPERFICIAL DECAY BETWEEN HIS TEETH. THESE BOYS ARE JUST NORMAL BOYS, COMPLETELY UNSELFCONSCIOUS ABOUT THEIR FOOD, TEETH AND SUPERIOR PHYSIQUES EXCEPT IN THE WAY ANY NORMAL BOY IS PROUD OF HIS PHYSICAL PROWESS. NATURALLY, BUDDIE WAS SURPRISED WHEN THE DECAY OCCURRED AND WANTED TO KNOW WHY IT HAPPENED AND WHAT HE COULD DO ABOUT PREVENTING IT.

OF COURSE THE DENTIST RECOGNIZES MANY FACTORS THAT MAY ENTER INTO A DERANGED BODY CHEMISTRY. BUDDIE HAD TAKEN ON THE JOB OF EDITING HIS HIGH SCHOOL PAPER AND OTHER EXTRA ACTIVITIES. HE IS EXPERIENCING THE LIFE OF THE CAPABLE AMERICAN HIGH SCHOOL BOY WHO GETS CAUGHT UP IN A MAZE OF ACTIVITIES AND OVERWORKS AS A RESULT. WE TALKED THESE THINGS OVER AND RECOGNIZED THAT THEY HAD UNDOUBTEDLY CONTRIBUTED THEIR SHARE TO THE DERANGED CONDITION WHICH THE DECAY MANIFESTED. BUT NEITHER OF US FOUND IT POSSIBLE TO THINK THEY COULD HAVE BEEN THE MAIN CAUSE OF WHAT HAD SO UNEXPECTEDLY HAPPENED TO HIM.

IT HURT TO FIND THOSE DECAY SPOTS IN BUDDIE'S MOUTH! BUT IT WAS A PLEASURE TO FIND THE DENSE, HARD STRUCTURE OF HIS TEETH — NOT THE SLIGHTEST BIT SENSITIVE — IN CONTRAST TO THE SOFT, LEATHERY TEXTURE OF MOST AMERICAN CHILDREN'S TEETH, WHICH ALLOWS DECAY TO BECOME DEEP-SEATED SO QUICKLY. THE AVERAGE AMERICAN MOTHER SHOULD SEE THE DIFFERENCES IN TOOTH STRUCTURE AND TEXTURE CAUSED BY THE KIND OF FOOD HER CHILDREN EAT AND REALIZE THAT THESE ARE BAROMETERS OF HER CHILDREN'S HEALTH NOW AND FOR THE FUTURE. THE GREAT MAJORITY OF AMERICAN MOTHERS WILL BE DOING FINE JOBS, TOO, WHEN THE KNOWN FACTS OF DENTAL HEALTH ARE SUFFICIENTLY STRESSED AND PUBLICIZED. TRUE, WE DENTISTS DO NOT YET KNOW THE EXACT MECHANISM OF DENTAL CARIES. BUT ALL DENTISTS HAVE ACCESS TO THE KNOWLEDGE THAT THE LAYMAN CAN USE — KNOWLEDGE OF NUTRITION THAT WILL BRING DENTAL HEALTH IF IT IS CONSCIENTIOUSLY FOLLOWED IN A MAJORITY OF CASES.

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