Dave Winfield's BATTER UP! THE ACT OF HITTING



Dave Winfield's BATTER UP! THE ACT OF HITTING

with Eric Swenson



Avant-Garde Publishing Corporation 37 Commercial Boulevard Novato, CA 94947

AVANT-GARDI

Copyright ©MCMLXXXV by Avant-Garde Publishing Corporation. All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

AVANT-GARDE is a trademark of Avant-Garde Publishing Corporation.

ISBN: 0-87275-019-1

Team W Roster

In the process of bringing a book and computer program together a team came together, and it is appropriate to acknowledge the line-up.

Scout: A. David Silver, who first had the idea for the project Lead off hitter: Dave Winfield, whose clear thoughts and words we all followed

Writer/Editor: Eric Swenson, who translated the spoken word into the written word, filled the gaps, and put it all together

Clean up hitter: Erin O'Connor, who cleaned up the prose, wielded ultimate power over the printed word, and wrote the program manual

Utility infielders, who programmed BATTER UP!: Brian Crouch (IBM), Don Fudge (Apple), Chuck Hughes (Commodore); and Angela Major, who tested the programs

Team artists, who provided the computer graphics for BATTER UP!: Peggy Thompson (Designer), David Escalera (Final Coordinator), Eric Martin (IBM), Mike Jahnke (Apple), Brian Hahn (C-64), Shelley Bratton (IBM), David Goodman, Lewis Macken, Erik Johnson

Spring Training Coordinator: Bill Crouch, who pulled the roster and schedule together

Manager: Louie McCrady, who kept us all in line

Coaches: Tom Measday, Caroline Bloomfield, Mary Carol Smith

Trainers: Jim Karanas and Joan Kent of Fitness-to-Go

Team Owner: Santa Fe Private Equity Fund Package and book designer: Pamela Shute

Photographer: Pete Stone Illustrator: Joe Saputo

Special thanks to Mark Lucich

CONTENTS

EDITOR'S PREFACE 1	
DAVE WINFIELD: A SHORT SKETCH OF A BIG MAN	3
PART 1	
ATTITUDE AND PSYCHOLOGY: THE SOUND MIND A THINKER'S GAME 7 WINNING AND LOSING 7 HITTING WITHIN 8 GAINING THE ADVANTAGE 8	7
PART 2	
FITNESS AND CONDITIONING: THE SOUND BODY NEEDS 10 GOALS 10 EXERCISES 11 Aerobic Exercises 11 Stretching-Flexibility Exercises 12 Strength Exercises 12 Anaerobic Exercises 14 OFF-SEASON CONDITIONING 14 HITTING-SPECIFIC EXERCISES 15 SWITCH HITTING 16 PRACTICE 17	10
PART 3	
HITTING TECHNIQUES AND OPTIONS: A LESSON WITH DAVE WINFIELD 18 THE BAT 18 Options: Weight, Length, and Shape 18 Balance 19 Care of the Bat 19 THE GRIP 20 Holding the Bat 20 End Grip 21	

Choke Grip 21 Extras: Batting Gloves, Tar, Sweat Bands 22 THE STANCE 22 Batter Up! 22 Feet First: Closed, Even, and Open 23 Position within Batter's Box 26 Experimenting with Stance and Swing 26 THE PITCH 27 Studying the Pitcher 27 The Deliveries 28 The Pitches 29 The First At Bat 34 THE STRIKE ZONE 35 Get a Good Ball 35 The Zones: Personal Best, Pitcher's, Umpire's, Two-strike 35 THE SWING 37 The "Meat" of Hitting 37 Path of the Bat 38 Coordinating the Body Starter Mechanism 42 Hips: Center of Action 42 Bat and Ball 43 Follow-through 43 BATTING FAULTS AND HOW TO CORRECT THEM 44 Lunging and Overstriding 44 Hitting off the Heels 44 Stepping in the Bucket 44 Locked Front Hip 44 Hitching 45 Lazy Wrists 45 Uppercutting 45 Chopping 45 Fear of the Pitch 46 Periods of Adjustment: Surviving the Slump 46 BATTING STRATEGY AND SITUATION HITTING 47 Knowing the Options 47

Bunting 47
Bunting for a Hit 48
Sacrifices and Squeezes 50
Hitting Behind the Runner 51
Additional Tips 51
WRAPPING UP: FINAL THOUGHTS ON PUTTING IT ALL
TOGETHER 53

EDITOR'S PREFACE

A sound mind in a sound body — suggesting techniques and regimens by which this ancient goal may be achieved and applied to hitting is the purpose of this program. It is a goal fully realized by Dave Winfield, who has established an admirable reputation for remarkable physical and mental abilities during his major league career.

Baseball is one of the most cerebral of all sports, and successful players must train both the mind and the body while stimulating the spirit. This program speaks to each. It aims to be inspirational, informational, and to the point. We believe that you will find the text in hand to be the most succinct, comprehensive guide to hitting ever published.

Dave's program outlines techniques to improve the skills of both youngsters and adults and those who coach them. Whether you are a rookie or a veteran, whether your goal is consistency or power, whether you are quick or strong or both or neither, there are tips in this book that will help you.

Our goal is to stimulate your ability to respond and your responsibility. Baseball is a game of action and reaction. If you can respond immediately or quickly, if your reflexes are correct, you will have an edge over your opponent. If you know what to expect, if you at least know what the odds are, you will be a leg up. If you can come to the game physically fit and mentally alert, you will play better. Knowing your options and being able to exercise them is the heart of successful hitting.

Batting is a science. Part physiology, mechanics, optics, physics, and aerodynamics, it has its own set of essentials combining these and other disciplines. Internalizing the proven fundamentals of baseball is essential to improving your game. You must learn and practice them until they are yours, part of your natural way of doing things.

This program is the culmination of what Dave has learned in 24 years of playing organized baseball (12 of them as a professional). In getting advice from Dave Winfield, you will be learn-

ing from one of the game's premier players and sharpest students. Dave coaches you on the three components of winning play: Attitude, Conditioning, and Technique, all that you need to better perform the ACT of hitting.

While numerous guides to batting by star hitters have been produced in the past, this is the first one to use the computer as a teaching tool. The computer demonstrates the baseball's behavior and teaches the player the positions and movements required to bat correctly. Recognition of different game situations and pitching styles is developed through tutorials and practice sessions. The program demonstrates techniques involved in hitting a variety of pitches and gives the player experience in anticipation.

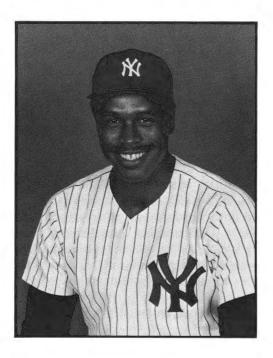
Players are also able to compete against themselves or other hitters in a game that tests their skills. They will be able to choose different playing fields and various pitchers. The small motor skills involved in playing computer games are not transferrable to the larger motor skills involved in batting. But reflex reactions, hand-eye coordination, and the knowledge of batting technique are transferrable, making this a useful, as well as entertaining, program.

Good hitting to you all.

Eric Swenson, Editor

DAVE WINFIELD: A SHORT SKETCH OF A BIG MAN

Dave Winfield is big. At 6'6", 230 pounds, he was big enough to be drafted not only by professional baseball (1973 first round draft pick of the San Diego Padres), but by football and basketball teams as well (Minnesota Vikings, Utah Stars, and Atlanta Hawks). But it is not just his physical stature that gives Dave such a large presence; much of what he does is epic.



His \$20 million plus contract with the New York Yankees was the biggest contract ever signed by an athlete. His all-star performances and records in both the National and American Leagues attest to his talents as a hitter and fielder. Dave's tape measure home runs and grace afield have won him the admiration of fans worldwide. But his achievements off the playing field also give a measure of the man.

Dave's interests are broad, and his commitment is deep. He has served as an advisor on youth, sports, and recreation to the U.S. and other governments. He is an avid collector of art and artifacts from around the world and owns a Minneapolis art gallery. In 1983, the U.S. Jaycees picked Dave as one of the ten most outstanding young men in the country.

Shortly after beginning his professional career, Dave established the Winfield Foundation, dedicated to improving the health and educational opportunities of young people and motivating youth to take a self-interest in their own health and education. The Foundation builds on the special relationship between athletes and children. Its multi-state activities have won the admiration of major league baseball, community leaders, state governors, and the White House.

Dave was born October 3, 1951, in St. Paul, Minnesota. (The date will live in baseball history as the day Bobby Thompson hit the shot heard 'round the world, winning the National League playoffs for the New York Giants.) Dave was raised by his mother, who stressed the importance of education and the value of discipline. As schoolboys, Dave and his older brother, Steve, were constantly active in sports and extracurricular activities. Dave's early goals were not to be a professional athlete, but by turn, a biologist, an actor, and a lawyer/politician.

Dave began playing organized sports in the fifth grade, at about the same time the Minnesota Twins came to town. His early hometown favorites were Tony Oliva and Harmon Killebrew although his idols were Willie McCovey, Bob Gibson, and Willie Mays. After high school, Dave accepted a scholarship to play baseball at the University of Minnesota. He was not only a college all-star, but a team leader as well. He also played basketball after being discovered by a coach during an intramural scrimmage against the junior varsity team. He became a starting player and helped take Minnesota to Big Ten championships in

both basketball and baseball, winning the College World Series Most Valuable Player award as a pitcher. Dave also excelled in the classroom. Named a Williams Scholar for his academic achievements, he graduated in 1973 with a B.S. in Political Science.

Drafted by the San Diego Padres in the first round, Dave went directly to the big leagues. He quickly established himself as a powerful and consistent hitter, leading the team year after year in several offensive categories. Dave also starred on defense, winning two Gold Glove awards (he's since won four as a Yankee, most recently in 1984). During his last two years with the Padres, he led them on the field as team captain.

His years in San Diego tested Dave in ways he had never been tested before. The Padres languished in or near the cellar, and practicing and playing for a team with little hope of a winning season, much less contending for the pennant, proved a lesson in discipline. A high point of Dave's Padre years was the tremendous reception the San Diego fans gave him during the 1978 All Star game. (Dave was a four-time National League all-star and has been chosen four times by the American League, playing in eight consecutive games.)

In 1980, Dave signed a \$23 million, ten-year contract with the New York Yankees. His first year with the team, the Yankees went to the World Series, a big thrill for Dave even though he managed but a single hit. Dave has served as player representative for the Yankees and has been a team leader in other ways as well. 1984 was his best year for batting. In a race for the American League batting championship that came down to the final day, Dave at .340 was edged by a .343 average. 1984 was also Dave's best season for hits (193), runs (106), doubles (34), and slugging percentage (.568). Among his 100 runs batted in were 13 game-winning hits. He had streaks of 20 and 17 consecutive games in which he hit safely. For the third straight year, he led the major leagues in run production per plate appearance. No hitter in recent times has been so efficient in producing scores.

Eric Swenson

Dave Winfield's Complete Major League Batting Record

Yr.	Club	Pct.	G	AB	R	Н	2B	3B	HR	RBI	BB	SO	SIg.
73	Padres	.277	56	141	9	39	4	1	3	12	12	19	.383
74	Padres	.265	145	498	57	132	18	4	20	75	40	96	.438
75	Padres	.267	143	509	74	136	20	2	15	76	69	82	.403
76	Padres	.283	137	492	81	139	26	4	13	69	65	78	.431
77	Padres	.275	157	615	104	169	29	7	25	92	58	75	.467
78	Padres	.308	158	587	88	181	30	5	24	97	56	81	.499
79	Padres	.308	159	597	97	184	27	10	34	118	85	71	.558
80	Padres	.276	162	558	89	154	25	6	20	87	79	83	.450
81	Yankees	.294	105	388	52	114	25	1	13	68	43	41	.464
82	Yankees	.280	140	539	84	151	24	8	37	106	45	64	.560
83	Yankees	.283	152	598	99	169	26	8	32	116	58	77	.513
84	Yankees	.340	141	567	106	193	34	4	19	100	53	71	.568
Lifetime		.289	1655	6089	940	1761	288	60	255	1116	662	838	.482

PART ONE

ATTITUDE AND PSYCHOLOGY: THE SOUND MIND



A THINKER'S GAME

As you read through this book, I hope there are several places where you learn something new or where a point is explained to you better than it ever has been before. More importantly, though, I hope you appreciate how cerebral a game baseball is and how essential learning and knowledge are to success. You must know what to do with a runner on first, one out, and a full count. You must know the rules. You must know how to play a particular pitcher or park. And you must know yourself, your role, and your abilities.

This last task is not as easy as it sounds. You may be your own favorite subject, but studying yourself realistically takes dedication. Before you determine just what you can or cannot do, try everything. Experiment. I've played every position in baseball except catcher. Although it was a bonehead play that exasperated my manager in San Diego, I tried stealing home in one game just to see if I could do it (I was out by a mile as a surprised Willie McCovey took ball four). Experimentation allows you to discover a range of skills and adapt them to the situation. Adaptability is a good ability to bring to baseball. It will help you break into the lineup as a rookie, and it will keep you on the field as a veteran.



MINNING AND LOSING

Particularily important is the balance with which you respond to failure. There is more failure in baseball than in any other sport I can think of. The very best hitters make an out seven of every ten times they come to bat. If you don't learn to live with failure, it will kill you as a player. If you're still thinking about how you went hitless in your last game, you're on your way to going hitless in your next game.

Over the long haul, baseball holds many setbacks, both individual and collective. You must keep on keeping on and go with the flow. I don't get too high or too low. Mental consistency, evenness, and balance will allow you to adjust to hard times

and stay even during good times. These qualities are necessary to lose with dignity and win with aplomb, perhaps the game's hardest lessons. Athletes are often told of how important courage is to sport. It means more than not being afraid of the pitch or being able to break up a double play with your body. Courage is the trait that keeps you from getting dis-couraged and allows you to be en-couraged when things look bad.

Set goals for personal achievement, and accomplish them. If your philosophy is "winning is the only thing that counts," you've got no escape hatch. Compete within.



HITTING WITHIN

I would not have a professional career if I did not have the power to go within myself when I hit, i.e., to tune out all distraction and negative thoughts — forget fans, family, friends. This requires concentration and discipline over your mental faculties. An essential feature of my interior landscape is the positive vision. If you can visualize the desired result as you stand at the plate, you have taken the first step toward realizing it. Do not underestimate the power of positive thinking, or negative thinking, for that matter. I always strive for a positive approach when I'm at the plate. Naturally this does not always result in a hit, but I know that everytime I've failed to be positive and let negative thoughts enter, I've also failed to get a hit.

Of course, nothing succeeds like success when it comes to visualizing desired results. You won't really know what it's like to get a clutch hit, a home run or a game-winning hit until you do it! And this is where confidence comes into play. Faith in your ability is increased everytime you succeed, and increased faith leads to increased success. Be confident, then work to deserve your confidence.



GAINING THE ADVANTAGE

Since I began playing baseball as a child, I've observed what separates different levels of players. Athletes bring varying physical skills to the game, but everybody is taught the same concepts. Whether they internalize the concepts and how they apply them is what makes the difference. The advantage top players usually have is relentless and aggressive mental discipline. They are always thinking, always looking for what it takes to win the game. They can concentrate and focus their thoughts, their attention, their strength on the task at hand.

Eliminating the role of luck, which is often a case of preparation finding opportunity, I find that winning boils down to achieving the advantage in three areas: Attitude, Conditioning, and Technique. The right attitude comes first. It is essential to achieving the other two. This is where it all begins. Keep in mind the primacy of the mind, the importance of attitude; it's the A in the ACT of Hitting.

KEY: Get in balance and gain the advantage.

PART 2

FITNESS AND CONDITIONING THE SOUND BODY



NEEDS

I'm tempted to oversimplify the physical requirements of a good hitter and say "good eyes and hands." But there's more involved than that — the ideal hitter is quick, strong, flexible, and balanced, and uses every part of the body.

Developing your body evenly and maintaining your balance is key; so your training should be general. Some parts of the body are more involved in the act of hitting than others; so your training should also be specific. Exercises to strengthen the wrists and upper body, for instance, will pay off at the plate. If you manage to hit the pitch, you must run the bases; sprint condition should be your norm. To accomplish this discipline over your body, you must first exercise discipline over your mind. Young players are in a strong position to reap solid dividends from investing in their fitness now, particularly if they carry these habits into later life.



GOALS

My goals in this section are varied. I want to pass on some tips I've picked up about physical training and to review a few essentials of health. But most importantly, I want to look at goals and suggest a mind set that will help you get your body set to play ball and to enjoy an active, healthy, playful life.

A sound body is the product of a sound mind. To be physically fit is the conscious choice of a thinking person. It's your responsibility to acquire the lifetime fitness skills needed to promote enduring good health, and you'll have to do it without the benefit of many good examples. Even many professional athletes, to cite but one group, are not in good shape. Getting in shape or staying physically fit is the first major choice you face as an athlete. A trainer or coach can assist you, but nothing happens until you commit yourself to the goal. Whatever that goal is — doing 30

pushups, losing 30 pounds, or adding 30 points to your average — I predict that in the course of striving for one goal, you will realize others. It all begins with setting the goal.

The tendency to be fat develops early — youngsters should not assume that being overweight is just a future problem. The single most important goal most people reading this need to set is to maintain the right amount of body fat. Athletes condemn themselves to injuries and take years off both their playing and actual lives by having too much fat and being out of shape. Excess weight requires excess energy to move. Fat frequently shows up in the mid-section, where it slows you at your core. This is the center of action of the body in motion. You must be able to move it with ease and efficiency.



EXERCISES

Aerobic Exercises

Aerobics consist of continuous, rhythmic exercises. They are a good and easy way to reduce body fat. If they are to be effective, a minimum of three half-hour weekly sessions is necessary. Unfortunately, many people who think they are doing aerobics, burning fat, and losing weight are doing no such thing. Their exercise is intense, lactic acid builds up, they get sore, but they do not lose any body fat. They lose none because in this state, they are drawing on the body's sugar, not on its fat.

"No pain, no gain" is a motto that has probably been seen on more gym and locker room walls than any other. When it comes to aerobic exercises, however, just the opposite is true. If you feel pain during or after these exercises, you're doing them incorrectly. Fat-burning aerobics are mild exercises, generally producing no more than a slight sweat. Your heart rate should be constant and your breathing steady. Walking briskly, cycling, or working out on a stationary bike are good aerobic exercises. The key is regularity. Ideally, aerobics are performed daily — certainly no fewer than three times a week. Exercise needs to be worked into your life style and daily schedule.

Aerobic exercises at low-to-moderate heart rates develop your body tone, facilitate your breathing, and help you control your body fat. They are necessary exercises to begin with if you are just starting a training program or a specific workout. Many trainers recommend warmup stretching before all workouts and games. I agree, but even before you begin your stretching exercises, you should warm up for your warmups with five to ten minutes of walking or easy biking. Raise your core temperature slightly so that your muscles are warmed and you don't begin to stretch from a cold start. Cold stretching is elastic and easily reversed; warm stretching is plastic, and the results last.

Stretching-Flexibility Exercises

Static stretching is an excellent way to develop flexibility. Muscles contract during athletics and will shorten unless stretching is regular. I recommend static stretching. Relax. Rest in a stretched position and hold the stretch for 20 to 30 seconds. Your breathing and your thoughts, what you visualize as you exercise, should promote ease, release, and relaxation. 15 to 20 minutes of stretching before a workout or game and a final stretching period of 20 to 30 minutes after activity is ideal. Only after you have begun to train your body through aerobics and stretching should you begin strength and anaerobic exercises.

Use stretching and related exercises during the game, too. Tighten, then loosen. Find the point that allows you to be wound but relaxed, the ideal state of preparation. I tense and then release before batting and while I'm in the field. I'm looking for the range of balance that signals being prepared. Baseball is a game of waiting and short bursts, and this activity helps you stay ready.

Strength Exercises

Calisthenics is the classic way to increase strength. These simple gymnastic exercises, many of them used by Greek athletes 2500 years ago, are still the best general way to develop your muscles and promote physical well-being. An added advantage is that pushups, pullups, situps, and jumpups can be done anywhere at any time. You need a few feet of floor space, not access to a well-equipped gym. Lastly, there is no major muscle group that calisthenics can't strengthen.

Assess which calisthenics are most appropriate. Where is your body weak? The hips and legs are considerably strengthened through the floor exercises and lifts that have been taught in aerobic dance classes for years.

One of the best exercises you can do, considering the importance of the stomach, is the situp. Although it is a simple exercise, it is often done incorrectly. Do not hook your legs or feet under an object to gain leverage or ask another person to hold your feet. Keep knees bent and feet flat on the floor. Don't cheat by rocking or using your upper body strength. Roll up slowly, keeping your lower back in contact with the floor. This exercise will strengthen your stomach and give you a better sense of how a tightened stomach feels. You should keep your stomach contracted as a matter of course and form. Suck it in and keep it in, all the time. Your whole body will be better off. Many people with back problems really have front problems. A tight belly will eliminate a multitude of troubles.

Isometric exercise is easily integrated into a calisthenic workout. With isometrics, your muscles contract while they are in a fixed position so that significant increases in tension occur without appreciable decrease in length. "The Dying Warrior" develops several parts of your body essential to hitting, notably the upper back, arms, shoulders, and wrists. Lower yourself to a pushup position and then hold your body two inches from the ground. Begin by sustaining the hold for 20 seconds and work yourself up to the point where you can stay in position for several minutes. To strengthen the fingers, do this on your finger tips.

Lifting weights is another way to develop strength. Working out on the bench is good for your pectorals, triceps, and shoulders. Dumbbells are excellent for the arms. Snatches, clean-and-jerks, and other quick lifts hone your timing and develop your explosive power. Correct technique and the guidance of an experienced weight lifter are crucial. Pumping iron the wrong way can lead to slow, bulky, inefficient muscles, imbalance, and injuries. One cardinal rule is to exercise your two sides equally. Balance your training. Don't get out of alignment.

Anaerobic Exercises

The last principal form of exercise is anaerobic. This exercise trains your body to draw on quick sources of energy needed for short burst activity and strengthens your cardiovascular capability. You can skip rope at a rapid pace when you can't run outside, but sprinting is still the best anaerobic exercise for baseball players. Many short sprints make up the game. One way to practice is to bat and run the cycle. Take your position as if at the plate, swing, and sprint 90 feet, the distance to first base. Resume your position at the plate, swing, and sprint to second. Return to home, then go the 270 feet that would get you to third base. Rest a moment or two and then sprint the 90 feet to home plate, coming in on a sacrifice. Finish the exercise by "hitting" an inside the park home run and making it around the bases as fast as you can. You can vary this exercise by leading off from first and sprinting to third or sprinting from second to home. In essence, practice the situations you face in an actual game.

Sprinting is not only a training device; it should be the way you get from one place to another once you're in the game. By sprinting to and from your position in the field, you'll keep warm and reduce the chance of pulling or straining a muscle. Sprints should be the exercises that conclude your pre-game warmups and the exercise that is the mainstay of your pre-season training, when you should be building up speed.



OFF-SEASON CONDITIONING

Off-season conditioning should reflect your awareness that fitness has a 365-day-a-year season. Although you will not be playing baseball, you should play handball, swim, or dance. If you want to develop flexibility, timing, balance, and coordination, try a class in modern dance. Dancing will strengthen the small muscles whereas most athletics develop only the major muscles. Perhaps most importantly, dance will give you an awareness of your body difficult to achieve through other activities. You have to know what's happening to your spine, your knees, and your pelvis as you move. Too many ball players learn the moves of hitting by imitating others and then spend the rest of their lives

just going through the motions. They don't ever understand the mechanics of their own bodies.

Post-season exercises should emphasize flexibility. Stretch things out. Year-around, keep your strength up. Keep a wrist exerciser handy or use a hard rubber ball to squeeze and strengthen your fingers and wrists.



HITTING-SPECIFIC EXERCISES

If you play organized baseball, you may have access to various training opportunities, such as a pitching machine or regular batting practice. Regardless of your circumstances, I recommend investing in a batting tee and a weighted bat for use at home. The tee consists of a home plate with an adjustable tube attached. Put the ball on the end of the tube at any height you desire. You can expand upon this exercise by batting against a wall, fence, or screen to which you've attached a target.

A weighted bat should be a constant companion. If you don't want to buy an exercise bat, make your own. Drill a hole in the end of a bat and drive a piece of metal into it, then use it. After practicing with a weighted bat, shift to your regular bat and practice swinging some more.

Even if the only equipment you have is a bat, you have the single best tool for improving your hitting. You can work on perfecting your stance and swing anywhere there's enough room for a full swing. Keep in mind all the essentials of hitting and try to turn them into habits. Swing again and again — full speed, half speed, slow motion, watching yourself in a mirror, asking others to analyze and criticize.

One last conditioning tip concerns a method of specific sport training developed in 1983. "Sagekinetics" was coined to describe the isokinetic training system designed by Steven Sagedahl. 1984 was my best year by far in baseball, and I credit my discovery of Sagekinetics with making much of the difference. I believe so much in the system that I have begun a corporate partnership with Steve to assist in promoting use of the machines and to make them available to a wide range of athletes seeking to improve specific sports skills.

No other method I've tried meets my goals of strength training and conditioning: Sagekinetics lessens my susceptibility to injury while increasing my ability to perform quicker, more exact movements of body with greater strength and stamina. Sagekinetics, unlike variable resistance or free weights, is "specific sport training." Athletes perform the movements in training that they perform in competition while experiencing accommodating resistance. These exercises can be performed at speeds approaching those of actual competition and beyond any at which I have ever worked out before. As far as I'm concerned, Sagekinetics is the state of the art for athletic training. Coaches, trainers, and others wishing to learn more about this system can write Sagedahl-Winfield, Inc., 750 Boone Ave. N., Golden Valley, Minnesota 55427.



SWITCH HITTING

Probably no other single factor can improve your batting average as much as the ability to hit from both sides of the plate. The benefits are several. You can see the ball longer if it comes at you from an opposite-side pitcher. Switch hitting allows you to "lead" with your dominant eye at least part of the time. Your dominant eye, like your power hand, is your body's natural inclination. If you are serious about hitting, you will make the effort to learn which way your body "leans."

There are more of both right-handed batters and right-handed pitchers in baseball. Batting lefty allows you to take advantage of this imbalance and also gain the edge on such hits as grounders toward first base. A switch hitter often saves the team from having to go to a pinch hitter and can also play different parks to full advantage.

In short, switch hitting adds tremendously to the hitter's versatility and is a skill worth striving for. Young players just developing their hitting are at the ideal stage to learn switch hitting. Even if you are past the age where learning to switch hit is practical, it will pay you to take regular practice swings from both sides of the plate. The exercise will help keep you in balance.

PRACTICE

One last word: Practice. Short of ignoring your other responsibilities in life, there is no such thing as too much practice. The regimen you establish for yourself may get repetitive. Even if you are imaginative and vary your exercises and practice routines — reducing boredom — you may be tempted to let down, to think that you can get enough conditioning just by playing the game. You can't. Practice and exercise — there's no substitute for either, and both are essential to developing your hitting skills. Yogi Berra's advice to batters is "Hit, don't think!" Of course, he doesn't mean you shouldn't be alert to the game situation. He means that when you're at the plate you shouldn't have to think about the mechanical and physical part of hitting. Practice them until they are automatic. If you want to be a good hitter, make clear in your mind what this requires, commit yourself to making it happen, then do it.

KEY: Set the goal and stay in balance.

PART THREE

TECHNIQUES AND OPTIONS: A LESSON WITH DAVE WINFIELD



Options: Weight, Length, and Shape

Baseball is a game of continual choices, and the first one to be exercised by the hitter is which bat to use. The size of your hands and length of your arms, your height and weight, and your quickness and strength are all factors in choosing the bat that is best for you. During my career I've used bats ranging from 32 to 38 ounces and from 34 to 36 inches. I'm a big man and can handle a relatively heavy bat, but there is no doubt that quickness, rather than weight, is the major element in hitting for both power and consistency. A light bat that hits the ball is infinitely better than a heavy bat that doesn't.

I emphasize the obvious here because at every level of play I've observed hitters using bats too heavy for them to control. Beginning players in particular have the tendency to choose too heavy or long a bat, hoping this will improve their power. The result is a loss of balance and control, slower wrist action, and impaired timing. In rare cases, you may get a few more long hits, but assuredly, you'll get a lot fewer hits.

One key to hitting is to wait as long as you can before you swing, learning as much as you can before you commit yourself. Then you must swing quickly. The heavier the bat, the harder this is. Of course, the heavier the bat, the denser the wood, the farther and faster it will drive the ball. Good wood in the bat imparts good jump to the ball. Look for a bat with the wide grain

characteristic of older wood. Such a bat will be more resistant to flaking and chipping, and hard-hit balls will not dent it.

A rule of thumb for beginning batters is to choose the heaviest bat you can handle easily. Then, to be on the safe side, step down from there. The best hitters of the modern game for both average and power — Musial, Mays, Williams, Aaron, Mantle — all used light bats. Most professional players prefer a 32- to 34-ounce bat with lengths in the same range. Younger batters should naturally use even lighter bats.

Such variables as different pitchers or game situations, injuries, and the time of season at which you're playing also affect your choice of bat. Where you hold the bat is an additional factor; a 34-ounce bat held with a choke grip will feel like a 32-ounce bat held with an end grip. Your position in the batter's box is also a consideration. With my size I can cover the strike zone standing far from the plate. Smaller hitters may swing from a position closer to the plate and opt for a shorter, "quicker" bat.

Balance

Concentrate on achieving a quick, easy, balanced swing. View the bat as an extension of your body. You must maintain control and balance to be a good hitter. Your bat must also be balanced. Shape is almost as important as weight or length in determining the balance of a bat. Most bats are cone-shaped, tapering down from the thick part of the bat to the handle. The diameter of the handle is important in choosing the right bat. Naturally, players with smaller hands must use bats with thinner handles. Don't be swayed in your choice by color, a cosmetic treatment, or whose name is on the bat, a promotional device. Experiment with different bats in your effort to find just the right one. Which bat you use is not only your first choice as a hitter; it may also be your most important one.

Care of the Bat

Once you have found the right bat, keep it in good condition. Bats should not be left on the ground to pick up mud or moisture and hence, weight.

They should be stored vertically in a dry place, especially in the off-season. An old trick for keeping the bat over the winter is to drive a small nail into the base of the bat, attach a string, and hang it from an attic rafter or in another dry location.

KEY: Choose a bat that allows a quick, easy, balanced swing.



THE GRIP

Holding the Bat

The most important aspect of holding the bat is how you align your knuckles. For maximum flexibility and wrist movement, the middle knuckles of your top hand should line up between the middle and lower knuckles of your bottom hand. With this grip you will be able to hit a ball at any part of the plate.



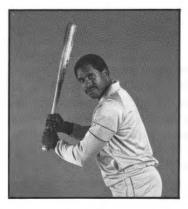
Knuckle Alignment

You must also maintain the right hand pressure. The correct tension is like a watchspring — wound, but not too tightly. During the swing, your grip will tighten. Until then, stay loose. Grasp the bat more firmly, however, with your bottom hand than with your top one. Your lead (bottom) hand and arm anchor the swing, helping to pull the bat through its path. Your back (top) hand is the "power" hand; it is closer to the point of impact,

and at the end of the swing, pushes the bat through its point of contact and into the follow-through.

End Grip

As a power hitter, I use an end grip most of the time. This permits maximum arm leverage. I grasp the bat ¼ inch to ½ inch from the bottom. If your hand is flush against the knob of the bat, your movement will be restricted and your wrist will not turn over completely. For this reason, some players opt for no knob or a very slight flare at the end of the bat. I advise young players to use bats with knobs. Smaller hands need assurance that the bat will not slip from their grasp. If you use the end grip, just give yourself a bit of room.





End Grip

Choke Grip

Choke Grip

The other basic grip is the choke. Holding the bat four to six inches from the end produces a shorter swing and allows greater control. Even power hitters shift to a modified version of this grip with two strikes or when there is particular need to place the ball. The choke grip is also used by hitters wanting to give more jump to the ball through using a heavier bat. Regardless of which grip you use, keep your hands together.

Extras: Batting Gloves, Tar, Sweat Bands

Although I use batting gloves, I do not recommend that young players use them. For me, playing day in, day out, and taking batting practice seven months in a row, the glove is a welcome option. I want to protect my hands from calluses and blisters. I also use resin, pine tar, and other sticky substances on my bat, and gloves keep my hands clean. In addition, batting gloves can protect your hands from cuts and scrapes when you are on the basepaths and sliding. For young hitters playing a limited schedule, though, batting gloves are mostly for show. Sweat bands for the wrist are, on the other hand, a sensible but not essential accessory for batters who sweat a lot.

KEY: Balance the bat.



(A) THE STANCE

Batter Up!

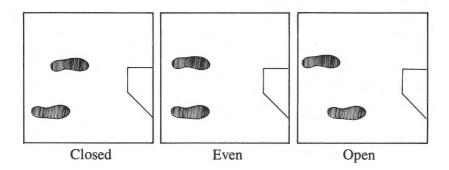
Stance is the most individual and idiosyncratic option in hitting. Nevertheless, there are pointers that will help hitters no matter how or where they stand. A general rule for spreading the feet, for instance, is to keep them at least as far apart as the breadth of your shoulders. Young players often keep their feet too close together — resulting in an early step, a long stride, and the tendency to pull the body away from the plate. A wider stance helps eliminate these faults.

Many players do not dig in at the plate, perhaps fearing that if they dig a hole, the pitcher will bury them in it. I dig a little mound of dirt with my back foot, a toe hold, a brace that allows me to push off as I step toward the ball. Though I don't think this is essential to successful batting, I recommend that players try it. Experiment with a variety of stances and refinements. If your experiment makes you feel more relaxed at the plate, it has succeeded.

Feet First: Closed, Even, and Open

There are three basic ways to position your feet: closed, even, and open. Most major leaguers, perhaps 70%, use a closed

stance with the front foot nearer the plate than the back one. The next most common stance is the even or parallel, where the feet are equidistant from the plate. Only a few players bat regularly from the open position, where the back foot is nearer the plate than the front one.



If you are not hitting straightaway, your stance will vary according to where you want to place the ball. When you want to pull the ball to the field on the same side of the plate on which you stand, use the open stance. If you're aiming to slice the ball into the opposite field, close your stance.







Even Stance



Open Stance

Once you have chosen where to plant your feet, balance on the balls of your feet with your weight evenly distributed. You can then concentrate on what should be happening in the rest of your body until it becomes automatic.

Your knees are bent a bit, accommodating the slight crouch of your upper torso. Your body is erect but compressed. Your hips and head are level, and your shoulders are almost level. I suggest you lower your front shoulder slightly, locking your head into place looking directly at the pitcher and preventing your back shoulder from dipping. There is more wasted motion in the shoulders than in any other part of the hitter's body. Any steps you can take to reduce unnecessary movement will improve your hitting.

Comfort will help determine how far from your body you place your hands. I recommend that you keep them fairly close to your body, no more than four inches to eight inches away and approximately shoulder high. I think you will find this gives you greater quickness, hand-eye coordination, and control over your bat. Your front arm is roughly parallel to the ground. Hold the bat fairly perpendicular. The greater the angle at which you hold the bat, the heavier it will feel as its resistance increases. Keep your bat still. Don't make the already difficult process of making the bat hit the ball any harder.

Bat upright

Head locked level

Eyes on ball

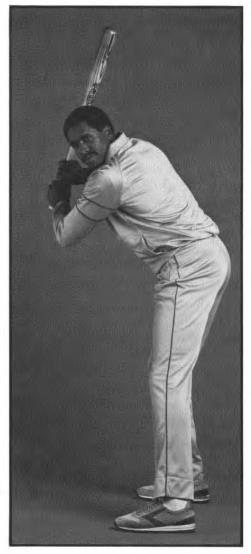
Front shoulder lowered slightly

Hands close to body

Hips level, ready to cock

Knees bent

Weight evenly distributed on balls of feet, heels down



Position Within Batter's Box

The distance you stand from the plate depends on such factors as your size and bat choice. Batters should make sure that they can cover the outside of the plate without getting jammed by inside pitches. To be sure of this, position yourself so that when you bend over slightly you can touch the outside edge of the plate with your bat. This will ensure that from your normal stance you will be able to cover the full strike zone. This will also require you to rise to the balls of your feet. Once you get up there, stay there.

How far toward the front or back of the box you stand depends largely on what sort of pitcher you are facing. Generally, the farther back in the box you are, the more time you have to react to the pitch, particularly to a fastball. If you are anticipating looking at sinkers, screwballs, and curves, you may wish to move up in the box and reduce the zone where these pitches break most sharply. Whatever stance or position you choose, practice it until you can assume it naturally.

Experimenting with Stance and Swing

I emphasize the importance of experimenting with your stance and position. You will make a wide range of adjustments over the course of a career, or even a single season. You want to be comfortably balanced, relaxed but poised, ready to coil and spring into action the moment the ball leaves the pitcher's hand. Pick up tips from other batters. See how different bats alter your stance. Experiment on ways to adjust and adapt your stance to the needs of the game.

Once you read the section on swing, you will have a better idea of what stance is best for you. You can then visualize where you want to end the act of hitting the ball. Choose a stance that allows you to make an easy swing, stride, and follow-through. Efficiency of motion is essential to the hitter. Any motion that does not add to your ability to hit the ball detracts from it. Keep this in mind at the plate. Avoid needless motion. This does not mean you eliminate the rhythm or motion most batters find a necessary prelude to the swing. I sway my body as I await the

pitch. It helps me establish the timing and back and forth motion that will soon become the stride and swing. You will also find it reduces tension and requires you to be "on your toes," or more accurately, on the balls of your feet. Your body should be in a state of ready relaxation, in balance, but with the initial inertia removed, moving.

KEY: Cover the plate and relax.



THE PITCH

Studying the Pitcher

Within team sports, there is probably no more intense a competition and individual a contest than that between the pitcher and the hitter. Though the duel does not formally begin until the batter steps into the box, the batter should prepare for that moment by studying the pitcher beforehand. What is the book on this pitcher? If you've faced the pitcher before, what was your experience? If you haven't, what are the experiences of others? What should you be looking for? When the pitcher's in a hole, what pitch does he go for? As the pitcher warms up, as you sit on the bench or wait in the on-deck circle, or when you're on the basepaths, you have continual opportunities to study the pitcher. Use them.

In the majors, the ball can travel almost 100 miles per hour and cross the plate in less than four-tenths of a second. As the ball hurtles toward you, you must make split-second decisions on whether and where to swing the bat. To do this effectively, you must anticipate the pitch you're going to get. If you're right, you're on your way to a hit. If you're wrong, you try to adjust. This is where your study of the pitcher pays off.

Pitchers try to disguise the kind of ball they are set to deliver. They will also try to distract the batter with high kicks, flapping sleeves, and other tricks. Your job is to penetrate the disguise and maintain your concentration. Look for visual cues that might tip you off as to what and where the pitch will be. Where does the pitcher focus his eyes before release? Does he favor a certain side of the mound or a particular stance on the rubber? Are there any tell-tale movements to the glove, or does he ever ex-

pose the grip? These are little giveaways that sometimes spell the difference between success and failure at the plate.

Watch the ball from the moment it leaves the pitcher's glove to the time it hits your bat. Follow the pitch intensely. There is no way to exaggerate the importance of the classic adage, "keep your eye on the ball." Don't react to the pitcher's body movements, which are probably designed to mislead you. Your best information comes from the ball itself. This is the bottom line of the old baseball maxim, "see the ball, hit the ball." Watch for tip-offs before the pitch, but when it comes to deciding where to swing, learn from the flight of the ball. Watch its rotation. Wait and learn. Wait as long as you can; learn as much as you can.

The Deliveries

The pitcher's delivery also provides clues that will help you anticipate what and where the pitch will be. The four delivery types are the overhand, the three-quarters, the sidearm, and the submarine. Most major leaguers throw three-quarters, fewer sidearm, few overhand, and only a couple throw from a submarine delivery.

The overhand pitch tends to be straighter with less motion than other pitches. It's a hard pitch to throw, and when overhand pitchers tire, they often hang the ball high up in the strike zone, a good place for the ball to be from the hitter's perspective. Certain pitches, such as the slider, are hard to throw with this delivery.

The three-quarters delivery is the most frequently seen and lends itself to a larger variety of pitches, and the pitcher can impart more movement to the ball. Generally, three-quarters pitchers can also keep the ball down low, forcing the batter to hit more grounders.

Sidearm pitchers are hard to hit if they come at you from the same side of the plate that you are standing on. The pitch seems to come from behind you and is harder to see. Some batters' initial reaction is to bail out for safety's sake. On the other hand, many hitters like facing sidearmers who pitch from the opposite

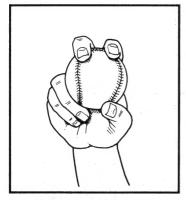
side of the plate. The pitch is on a single plane, it's flat, and when it breaks it goes only one direction. The pitches are easier to anticipate and adjust to.

Pitchers who use the submarine delivery are rarities. I've batted against two of the best: Dan Quisenberry of Kansas City, who is just tops, and Kent Tekulve of the Pirates, a tough beanpole of a pitcher. Submarine pitches can break on several planes. They are deceptive, lively, and mighty hard to control. Thank goodness very few pitchers master the technique.

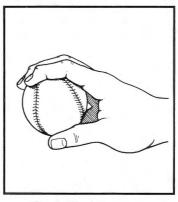
Until I was drafted into the big leagues and started playing the outfield, I was primarily a pitcher. My knowledge of pitching skills gives me a real advantage at the plate. As a moving object interacting with the atmosphere, the baseball is subject to the laws of aerodynamics. A basic appreciation of how the different pitches are thrown and how they move through the air is essential information for the hitter. The summary below should get you off on the right foot.

The Pitches

Fastball — the most popular pitch in baseball and the easiest to control. The most effective fastballs have both speed and move-



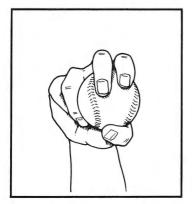
Fastball front view

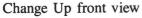


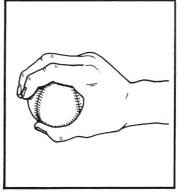
Fastball side view

ment. A rising fastball is thrown with the fingers across the seams and the wrist on top of the ball, imparting a tight backspin to the pitch that's accentuated when the pitcher pops his wrist at the end. You'll see a lot more low-breaking fastballs, and I cover this variation under Sinker below. Depending on how the ball is released, the pitch will also move laterally. The top major league fastballers have been clocked at almost 100 miles per hour.

Change-Up/Palm Ball — The change of pace depends for effectiveness upon the false expectation of the batter. The change-up is a slower pitch disguised to look like a fastball. Pitchers often hold the ball well back in their hands, against the palm. With the ball "choked" this way, the pitcher can throw hard and the ball will still not travel very fast. A dead wrist at the end of the delivery also helps slow the change-up down, as does a diminished follow-through.



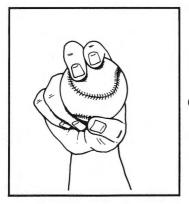




Change Up side view

Curve Ball — thrown with a curve of the arm, concluding with an overhand snap of the wrist. Most commonly, the thumb and forefinger direct the ball while the middle finger and wrist spin it.

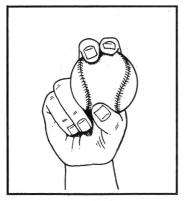
The ball can be delivered fast or slow and spins over the top. With overhand pitchers this means a ball that breaks downward; the side-armer's curve breaks sideways. Hitting the curve ball (or "deuce," as some call it) is many batters' toughest assignment. Go with the pitch. Watch the rotation. Wait as long as you can to read the break, and then be quick with your bat. Many otherwise superb hitters cannot master the curve and therefore never



Curve Ball front view

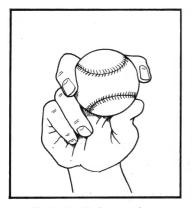
advance beyond a moderate level of competence. Pitchers generally aim to deliver curves below belt level. High curves break less, and when they hang up there — just below eye level — you can read the rotation and give the ball a good ride.

Slider — This late-breaking pitch looks like a fastball and acts like a curve. It's a bit of both — a cross between a cut fastball and a "nickel" curve. The slider spins like a spiraling football. Most pitchers keep it low and away although some will crowd an opposite side hitter. From most deliveries it breaks sideways. It goes away from you, not as far as a curve, but faster.

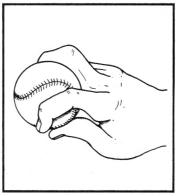


Slider front view

Fork Ball — The pitcher jams the ball between his first and second fingers, which do not touch the seams as the ball slides between them.



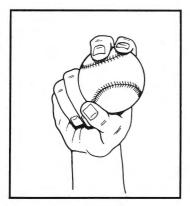
Fork Ball front view



Fork Ball top/side view

He releases the ball with a sharp snap of the wrists and a hooked downward spin. With less rotation, the pitch is an unpredictable, tumbling ball that acts as a change-up.

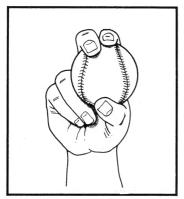
Screw Ball — Thrown as an off-speed pitch, the ball acts like a reverse curve. Just before release, the pitcher tightens his thumb, twists his wrist, and gives a sidewards rotation to the ball.



Screw Ball front view

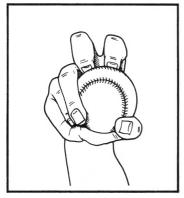
The ball breaks away from the batter and so is usually seen by right-handed batters facing lefties and vice versa. The screw ball may qualify as baseball's most unnatural act; no pitch is harder on the pitcher's arm.

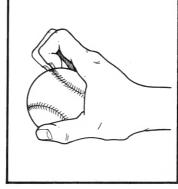
Sinker — the preferred pitch when a double-play is needed. The ball breaks low, falling away from the batter and forcing him to hit a ground ball. The ball is thrown with the middle and index fingers paralleling the seams and rotates in the opposite direction from a curve. The angle of release, speed, and throwing with the seam determine the movement of the pitch, which can vary greatly.



Sinker front view

Knuckle Ball — the most unpredictable pitch; not even the pitcher knows how it will break. The ball is thrown, not with the knuckles, but with the finger tips or nails gripping the ball tightly.





Knuckle Ball front view

Knuckle Ball side view

It is delivered with a stiff push of the wrist and no rotation and so responds more readily to factors such as wind and humidity. The ball flutters to the plate at a leisurely 70 mph. Its flight is erratic, and the pitch can break sharply in any direction. One sports announcer compared it to a drunken butterfly. It's a small consolation that the pitch bedevils catchers as much as it does batters.

The First At Bat

One final tip regarding the pitch is to learn as much as you can from the first pitch your first time up. I recommend against swinging at the first pitch. Personally, I hate to risk making an out on the first pitch, and I seldom get a great pitch to hit the first time around. Waiting also increases the chances that the pitcher will make a mistake. 70% of the time I let that first pitch go by. This allows me to see just what the pitcher has going for him that particular day.

With the first pitch of your first at bat, you usually see the pitcher in top form. How fast is his fastball? How much movement

does his breaking stuff have? You also can learn a bit about the umpire. Where's his strike zone on a close pitch? Later in the game this information may prove vital. Of course, this strategy may change with men on base and should change with subsequent at bats.

Ted Williams claimed that in his effort to learn more, he swung at the first pitch only 5% of the time. This may have been carrying a good idea to an extreme, but it's hard to argue with a man who sports a .344 lifetime batting average. Nevertheless, my advice is that unless you're Ted Williams, don't get into a rut that makes you so predictable. You are the pitcher's problem; avoid being part of the solution.

KEY: Know what to look for; anticipate.



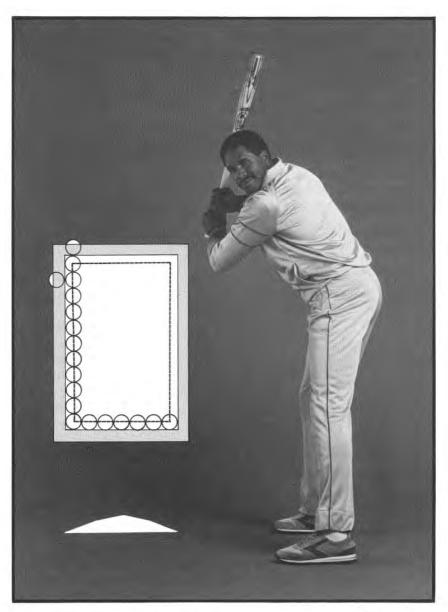
THE STRIKE ZONE

Get a Good Ball

I'd like to begin this section with a piece of advice from Ted Williams and pay tribute to one of the game's finest hitters and best students. The first rule in Williams' *The Science of Hitting* is: GET A GOOD BALL TO HIT; this means a strike. The legal zone is mid-knee to mid-chest, the width of the plate — 17 inches. All good balls to hit are strikes though not all strikes are good balls to hit.

The Zones: Personal Best, Pitcher's, Umpire's, Two-Strike

Williams' *The Science of Hitting* (perhaps the best book about batting I ever read) explains the distinction well. I remember in particular a photograph of Ted awaiting a pitch, and over the strike zone was a diagram of his personal preference strike zone. It showed his batting average depending on the position of the pitch. Down-the-middle-pitches Williams could hit for .400; high and inside, his average fell to .320; low and outside pitches yielded the lowest average, .220. Most dramatically, the diagram showed what happens if you increase the strike zone by less than the width of the baseball. The pitcher's target increases 40%.



Legal Strike Zone — Note 40% increase in target you allow the pitcher by chasing balls just outside the strike zone (shaded area).

Good pitchers create and maintain their strike zones — which may differ slightly from the legal strike zone — by consistently pitching to a particular part of the plate. The pitcher does this to be in control and to influence the umpire's decision. If the pitcher discovers in this cat and mouse game that the umpire is accepting the pitch as a strike, you'll see more of it. If not, the pitcher will change.

Having learned the legal zone, personal best zone, and the pitcher's zone, the smart batter must also adapt to the ultimate strike zone, the umpire's. In moving between different levels of play and even different professional leagues, I've found that umpires have differing views of what constitutes a strike.

The strike zone also alters depending on the count. With two strikes, for instance, you must guard against the corner-catching called third strike. Move closer to the plate, choke up, and aim for greater control and quickness. A major flaw of many sluggers is that they always go for broke Two strikes is the time to rein in the fencebusters and make adjustments.

Remember, you will get what you ask for from the pitcher, for better or worse. By this I mean that if you demand a strike, the smart pitcher will realize he must either give you a ball you can hit or walk you. If, on the other hand, you chase after bad balls, that's what you'll get. Swing only at strikes, and the pitcher will give you the benefit of the doubt. Maybe even the umpire will. Discipline yourself. The heart of batting is aggressiveness, but the brains of batting is patience.

KEY: Know your zones and wait for your pitch.

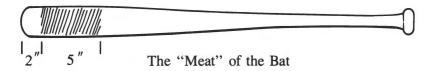


(THE SWING

The "Meat" of Hitting

In taking up the swing, we are turning to the meatiest part of hitting. It is appropriate that we begin by discussing the "meat" of the bat. This five-inch section of the bat, located at the head, a few inches from the end, is also called the "sweet part" or "joy spot." It certainly gives hitters joy to lay this part of the bat into the pitch; the best wood in the bat gives the best jump to

the ball, and that is what successful hitting comes down to. Get the head of the bat out front and into the pitch when you can and *always* on a good strike.



You will not see many pitches down the middle, where it is easiest to connect with the meat of the bat. You must learn to adjust your swing so that the meat of the bat is in the right place at the right time. This is done with the hands alone. I think it is misleading to suggest, as some batting guides do, swinging early or late to cover inside or outside pitches. When you swing early or late, you greatly reduce the solid hitting area of the bat. You must make adjustments, but you make them only with the hands. If the pitch is coming inside, you do not begin to stride or uncoil any sooner than you would with any other pitch. You do bring your hands out and turn your wrists more quickly. You handle outside pitches through slightly delayed wrist action.

Path of the Bat

Having established the part of the bat that you want to get into action, let's consider the correct path of the bat. Despite what you might read or hear about swinging level or even down, your regular swing should be slightly upward. This just makes common sense. The pitcher releases the ball about head-high while standing on a mound 10 inches high. He is generally aiming to deliver the pitch to the lower part of the strike zone, about two feet off the ground. Over the distance to the plate the ball travels downward at about 5 degrees. For maximum effectiveness, match

the angle of the pitch with an upward swing of 5 degrees. Any deviation from this path will reduce the zone of impact. Having advised you to swing upward slightly, let me emphasize how slight an angle 5 degrees is. You do not want to uppercut the ball and end up with a pop fly or weak grounder. You want to produce line drives; 7 out of 10 will go for hits. Only 1 fly in 10 and 2 or 3 grounders per 10 result in hits.

There are occasions when you might want to vary your swing path. When I'm going for a sacrifice fly, I'll increase my upward angle. If I want to hit a grounder, particularily when I'm playing on astroturf, I swing downward. Again, recognize that I am talking about a very slight adjustment. Avoid tomahawking or chopping the ball. The ball travels quite differently on astroturf than on grass. It's faster and shoots out of the fielder's reach more quickly, particularly on the second bounce. A smart hitter playing on astroturf might have a 20 to 25 point advantage in batting average over his counterpart playing on grass, where the bounces are softer and the balls are slower.

Coordinating The Body

Let's move from where you swing the bat to how you swing it. There is no other action in baseball that requires as much coordination and timing. Review in your mind the stance from which you begin the swing. You are in a slight crouch with knees bent and your hands close to the body, approximately level with your upper chest. Your front arm is parallel to the ground. Your head and hips are level, and your front shoulder is lowered slightly, locking your head into a direct look at the pitcher. You are relaxed.

As the pitcher begins his windup, you begin yours. Think of yourself as a pistol. The safety is off, you're pulling the hammer back and cocking the gun, and your finger is on the trigger. You're ready to explode.



① Bat already cocked; weight back on firm rear leg



② Stride completed; bat is launched forward



(5) Weight on top of firm front leg



6 Weight has shifted; hips continue to open up



3 Swing starts to level off



4 Swing begins rise; hands continue to lead bat



Arms extended as bat swings through ball



8 Head stays down; follow-through completed

Starter Mechanism

The explosion is initiated by the starter mechanism. As you begin your attack on the pitch, several actions occur simultaneously. As in cracking a bull whip, casting with a fishing rod, or teeing off at golf, backward motion precedes forward motion. Your front knee turns inward as you lift your foot backward to begin the stride. Your shoulders and hips rotate to the rear, properly cocked.

You continue with a short, light-footed stride forward and slightly toward the plate. (Strides longer than 8 inches may throw your timing and balance off.) Even with this movement, about 60% of your weight is still back, ready to come forward at the moment of impact.

As my foot goes forward, my hands go backward. I have a long swing. Like a rubber band, the farther I pull back, the more forward force there is. My movement at this time is pronounced; other players have little or none. Rod Carew, for instance, holds the bat stationary until the ball is upon him and then makes a short, quick flick with his bat.

Hips: Center of Action

With the stride completed and foot planted, the hips open up and lead the rest of the body through the rest of the swing. The midsection is your center of gravity, and it makes sense that it is the core of the swing's action, the place where you generate your power. Imagine a pole through the middle of your hips. Your hips pivot around this pole, pulling your shoulders and arms, which rotate around your hips.

Throughout the swing, your head remains steady and level. Its only movement is to come forward with the rest of your body. A level head helps balance the body. A steady head is a key part of the torque developed by your body as you swing. In conjunction with your feet, it provides the torsion as the hips and shoulders rotate.

Bat and Ball

By this time, the bat has begun to flatten out and move forward. Your hands and arms direct the bat. Keep them and your elbows close to your body, ensuring that your bat will make a tight circle and concentrating the energy of your swing. Your bottom hand pulls and anchors the bat while your top hand pushes and guides it. Your bottom forearm will be almost perpendicular to the bat, and your top forearm will move as if delivering a forceful karate blow.

As your hips open wider still, your shoulders begin to open. Your arms and hands are well in front of the plate while the bat remains behind. Your wrists remain solid and firm as the bat moves into the ideal hitting zone in front of the plate.

To attack and propel the ball fully, you need a firm foundation with your legs helping to provide the power to drive through the ball. Legs are the body's strongest part. The more you can bring them into play, the more power you can deliver. As you step lightly but aggressively, your back leg turns as your back foot pivots. If you have shifted your weight correctly, your back toe will be pointing directly downward.

This is the moment of truth for the hitter. I can get eager for the impact just thinking about it. Timing is all. The spring is sprung. Coil becomes uncoil. If you have anticipated correctly or adjusted accordingly, the bat hits the ball.

Follow-Through

The last essential action of the swing, the follow-through, occurs after the ball leaves the bat. Without it, however, the ball you hit will not travel far. Only now does your bottom wrist break and roll as it must for the bat to swing through the ball. Your arms are fully extended. The bat makes an almost complete circle around your body. Your weight is on your front foot. A balanced swing and follow-through leave you poised for your next move. Push off, drop the bat, and run.

KEY: Wait; hit behind the ball; keep your balance.

BATTING FAULTS AND HOW TO CORRECT THEM

Lunging and Overstriding

While these two faults are separate, they occur at the same time and often together. The overstrider takes too long a step into the pitch. The lunger steps into the pitch too early. Loss of control, power, and timing result. The wrong "first step" throws everything that follows off.

Correction:

Widen your stance to limit your stride and concentrate on achieving correct distribution of weight -60% on back foot until moment of impact.

Hitting off the Heels

Shifting your weight to your heels as you swing results in the body and bat moving away from the plate. You lose a great deal of power and have difficulty with outside or off-speed pitches.

Correction:

Keep your weight on the balls of your feet.

Stepping in the Bucket

Striding away from the pitch also causes a loss of power and inability to hit an outside pitch. Sometimes, particularly in younger players, the fault originates in a fear of being hit by the pitch.

Correction:

Concentrate on the hip cock and extend your rear arm back.

Locked Front Hip

Failure to unlock the hip during the swing reduces your power considerably. Your follow-through suffers, and pulling the ball is almost impossible.

Correction:

Open your stance slightly. During your warm-up swings, rotate your hips fully and get into the swing of things.

Hitching

Dropping the hands leads to a rushed, late, upward swing likely to produce fly balls or complete misses.

Correction:

Lower your hands and raise the rear elbow. Many "hitchers" do not realize their flaw. If the bat is held against the shoulder, the batter will feel and recognize the hitch.

Lazy Wrists

Failure to bring the bat around quickly enough results in a loss of power, diminished follow-through, and weak, sliced balls to the opposite field.

Correction:

Weak wrists are often the source of the problem. Exercise the wrists, hands, and fingers; develop your strength. Squeeze a rubber ball and, if they're available, lift weights.

Uppercutting

When the batter dips his rear shoulder, drops his back knee, and swings up at the pitch, his front shoulder rises, hindering his view of inside pitches and making it more difficult to hit high pitches.

Correction:

Raise the back elbow and shoulder and tuck your chin into your lowered front shoulder.

Chopping

Swinging down on pitches decreases your hitting area and makes it particularily difficult to hit low balls for anything but grounders.

Correction:

Return to basic form and concentrate on a level swing.

Fear of the Pitch

Some players, especially young ones, have an inordinate fear of the pitched ball that limits their ability to hit. Though players should have a healthy respect for the ball, very few injuries result from being hit by a pitch and even fewer are serious. Batting helmets should, of course, always be worn. Players should also learn how to roll away from the pitch. It's a simple move. Turn your upper body quickly a quarter turn toward the rear to protect your head and upper body. Practice rolling until it is a reflex. A drill that will help you is to have someone pitch to you as if in regular batting practice. The pitcher should use a tennis ball and occasionally throw directly at you, giving you the opportunity to practice the roll.

Periods of Adjustment: Surviving the Slump

The individual faults above mostly result from or in your timing being off. They often affect only your ability to hit a certain kind of pitch. When you can't hit any pitch, when your timing is gone and your faults seem more collective than individual, you are in a slump, or what I call a "period of adjustment."

Slumps happen to all hitters. Leveling off from a period of top form or suffering through a prolonged period of below-par play is distressing and can have many causes. Players may be physically or mentally tired, distracted by personal concerns, or be temporarily overmatched by the pitchers. Or they can be overly zealous and desperate to get out of the slump and so even more inclined to get into bad habits. They can even be hitting the ball solidly but not safely. There are several ways to go 1 for 30.

Getting through a period of adjustment is no easy task, and there is no one way. Begin by analysis. Review the basics. What are the pitchers doing to you or what are you doing to yourself? If you can isolate the cause, practice can help. Work it out. If not, maybe you've been analyzing and practicing enough. Analysis can produce paralysis. Take a few days off. Relax, regain your perspective, and come back for a fresh start. If you are fortunate enough to have film or videotape of your performance when you were in good form, replay and study it. There are lots of ways to

go wrong, but only a few ways to go right. What were you doing then that you are not doing now?

When I'm in a period of adjustment, I'm like a car misfiring. I need a tune-up; my timing must be adjusted. Some players attempt to achieve this by extended batting practice during which they take an easy, level swing, trying to drive the ball directly back through the middle of the box, gradually increasing their power.

Whatever it takes, just remember: You'll get back into the swing of things. It's just a matter of time and timing.

KEY: Synchronize your movements again.



Knowing the Options

Many factors influence how and where you aim to hit the ball. What's the score? How many outs? What inning? How many runners are there and where are they? Where are you in the line up, and who's hitting behind you? What direction is the wind blowing? Is the field slick? How does the defensive positoning look? Are there any gaps or weaknesses you can exploit?

The examples below are but a few of the possible situations you will face during a game. They should suggest to you the tremendous wealth of options that baseball players face. These options increase as your skill and level of play increase. The more options there are, the more there is to think about. One main reason I appreciate baseball is the great intellectual challenge of the game.

Bunting

A frequently neglected weapon in the hitter's arsenal is the bunt. There are two varieties: the sacrifice or team bunt, which advances the runner at the expense of the hitter, and the individual bunt for a hit. "Sluggers" in particular should develop their ability to deliver the bunt when called upon. This means fre-

quent practice. As you take your regular cuts during batting practice, lay down a few bunts. If you have a reputation as a slugger, the bunt will be all the more unexpected and so likely to succeed.

Some players preparing to bunt bring their rear foot forward until it's parallel with their front foot and face the pitcher entirely squared around. I recommend keeping your back foot to the rear, pivoting on the balls of your feet. Your upper body faces the pitcher fully, but you are not flat-footed. As you pivot, slide your upper hand (thumb on top) up close to the trademark and maintain a loose grip on the bat. Aim to hit the ball with the top three inches of the bat. Keep the head of the bat high so that you'll be able to better control the ball. Don't jab at the pitch; let the ball hit the bat. Remember that you do not want the ball to travel far. If you don't deaden the impact, you may end up with an easily handled grounder.





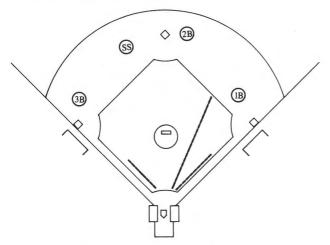


Pivot Stance

Bunting for a Hit

The sacrifice bunt is usually expected, and therefore, the element of surprise isn't involved. Surprise is essential, however, if you are bunting for a hit. Aim to hit the ball down the third base line or past the pitcher on the right. A left-handed batter has the

additional option of beginning his move toward first base and "dragging" the bunt along that baseline. Drag bunts or bunts "pushed" past the pitcher should be hit with a bit more force than the shorter bunts used to sacrifice or the bunt for a hit down the third base line.



Placement of Bunts for Hits



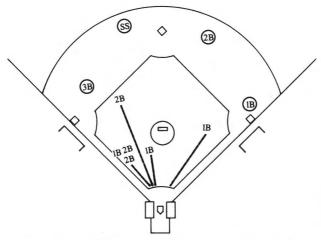
Bunting for a hit

If you are already committed to bunt and can't lay down a good bunt, bunt foul. Don't risk not being able to run out a poorly placed bunt.

Another tip is to drop your back foot almost into a sprinter's position. Be primed to tear down that base path.

Sacrifices and Squeezes

Bunts and long flies are also designed to advance the runner. There are several varieties of sacrifices that the batter must master. With no outs, fewer than two strikes, and runners on first and/or second base, the sacrifice bunt makes sense. With a runner only on first, the bunt can be placed midway between the pitcher's mound and the baselines. With runners on first and second or only second, aim the bunt down the third base line to pull the third baseman from the bag.



Placement of Sacrifice Bunts Depending on Base(s) Occupied

The squeeze play is a gambling sacrifice bunt with a runner on third. It is usually employed only in the late innings of tight games. With the safety squeeze, the runner breaks for the plate the moment the ball is bunted. The suicide squeeze requires the runner to break the moment the ball is released. A pre-arranged signal alerts the runner. It is essential that the bunt be completed to protect the runner. A double squeeze can be called with runners on second and third. The runner takes a big lead off second

and rounds third at full speed. The play's success depends on the batter's ability to hit the ball so that the fielder does not see the runner and goes for the put-out at first base.

Hitting Behind the Runner

A basic offensive tactic is hitting behind the runner. With first base occupied and one or no outs, the batter tries to hit the ball into the gap between first and second bases caused by the first baseman's having to hold the runner close to the bag. A well-hit ball will travel into right field, advancing the runner to third. Even a ball that is fielded will most likely be done so by the second baseman moving left. The play is at first, and the runner advances to second.

If the runner breaks for second at the start of the pitch, the second baseman must protect against the steal, and an even wider gap is opened up for the hitter; or the shortstop covers second, opening a different hole for the hitter. This is called the "hit and run," although actually, the order is reversed. "Hit and run" is tried most often when the batter is ahead of the pitcher on the count and has the expectation that the next pitch will be a strike.

In this situation, look for a pitch on the outside of the plate. (You can sometimes draw an outside pitch by stepping back from the plate a bit.) Swing a split second later than usual. On an inside pitch, do not try to get the head of the bat in front as with other pitches. Your hands must be in front, leading the action with the bat trailing. This swing is more of a push, with the arms never extended, and is called "an inside-out swing." Pushing the ball in the opposite direction requires a great deal of bat control.

Additional Tips

The hitter's ultimate goal is to produce runs. The next best thing is to advance the runner. There are, for example, nine more ways to score from third base than from second. So move that runner around with a hit or a walk or even by getting hit by the pitch. Except for hitting into a double play, nothing is worse than a strikeout. If you can get the ball into play, even if the fielder has

a chance, lots of things can happen. A defensive error or mental lapse can advance both you and the runner. If you strike out, that's all she wrote.

With two strikes or with the infield drawn in or when you're in a slump, try to hit the ball back through the box, up the middle. If the pitcher is a bit wild, wait him out, don't help him out. Let him walk you or nick you with a pitch. If the pitcher is consistently behind and you've got him down, keep him down. Don't let up by chasing a bad ball. Exercise your brain and your patience.

The reader should, by this time, be confirmed in the belief that baseball is a game for thinkers. A player who is diligent, who studies the game and the opposition, and who is always thinking will have an advantage over a mentally lazy player who may have better physical skills.

KEY: Do your homework; know your options.

WRAPPING UP: FINAL THOUGHTS ON PUTTING IT ALL TOGETHER

As you've read this book, I hope you have been struck by how central *balance* is to everything I am trying to teach. Balance is the one great key. If you can bring spirit, mind, and body into balance, you will have made a tremendous achievement in life. Baseball can be a means to that end. Balance is also the essence of choosing a bat, taking your stance, and making your swing. If you can achieve balance in these areas, you will be a consistent hitter.

Baseball has been the greatest vehicle in my life for learning about life. It has taught me about myself and others, and about how to work and play with people of all backgrounds. The friendships and camaraderie that have been formed on the playing field have been both exhilarating and deeply satisfying. Baseball also paid my way through college, where I was able to develop intellectually and hone my athletic skills. As a professional all-star, I have achieved a life many readers might yearn for. Although it's possible that no one reading this guide will ever play professionally, I hope readers will be able to find inspiration or at least a lesson in my story.

Set your sights high. For youngsters, the odds may be tremendously long against long-term athletic success, but the stakes for winners are also tremendously high. In the process of striving for one goal, you inevitably find yourself realizing others. Discipline yourself through baseball, and who knows what other intellectual or physical pursuits you will be better equipped for. You may never play professionally, but you could win a college scholarship. You may be long past any league except the parks and recreation slow-pitch division. You can still use baseball as an incentive to achieve or maintain fitness.

Become a student of the game. If you already are, resolve to delve deeper. Learn all the rules of the game. Never let it be said that you don't know the fundamentals. Practice them until

they are automatic. Learn from success — yours and others'. Study teammates and opponents, and when you have the opportunity, players at higher levels. I learned a lot from players like Hank Aaron, Pete Rose, Joe Morgan, Billy Williams, Steve Garvey, and Willie McCovey. These players offered me more than technical advice; even more valuable was the example of their mental approach to the game and the hustle and savvy that turns a single into a double.

Read about baseball, and I don't mean just *Sports Illustrated*. Ted Williams' *The Science of Hitting*, written with John Underwood and published in 1970, is a true classic. Charley Lau's *The Art of Hitting .300*, written with Alfred Glossbrenner and published in 1980, is also worthwhile. Lau used new videotape and photographic technology to analyze hitting style and was one of the game's best teachers. Ask coaches and other players what books they have found to be most valuable.

I play baseball at many levels and enjoy all of them. Baseball is a game, a science, an art, a sport, and a business. For me, it is first and foremost a game. I don't ever lose sight of that. I have fun playing ball. The game is also a science; I can experiment in a "laboratory," learning through trial and error, discovering new frontiers. In addition, it is also an art, to be pursued gracefully. The act of hitting or fielding can be a thing of beauty. Baseball is also a team sport that consists of a series of individual contests. It is lastly a business, and it gives me satisfaction to know that I'm one of the highest paid players in the game. It's a line of work that gives me the off-season time and freedom to write this book, for instance.

This book is my best shot at putting it all together. I've tried to identify the essentials of batting. I've analyzed them and suggested how you could synthesize them. This book reflects the best of what I've learned in over two decades of playing baseball at all levels. I can honestly say I wish I had known all that is in this book when I started out or even a few years ago.

Putting it all together to the best of your ability is now your job. If you are very young, this may be difficult because a certain degree of success will come only with maturity. Power accom-

panies growth, and growth is inevitably incremental. At a young age, knowledge and use of the correct mechanics is more important than getting a hit the "wrong" way. It is also essential that a young player experience a sufficient number of opportunities in the proper setting to improve as a hitter.

My final hope for this book is that it reaches a wide and diverse audience and speaks to them about more than just baseball. Part of my pleasure in the game comes from feeling that I've excelled at a game enshrined in America's heart, a game anyone can join, and the game of choice of millions of Americans on a Sunday afternoon in the park. Whether you just want to be a bit more proficient at bat on those Sunday afternoons or whether your ambitions are higher, I hope this book fills the bill and then some.

Learning to be the complete hitter will teach you the virtue of patience, for these are lessons you learn, connect, apply, and adapt, not just for spring training or a season, but year after year. The cumulative effect is what you strive for, the synergistic whole that is greater than the sum of its parts.

It's all in your hands now.

LIMITED WARRANTY, DISCLAIMER OF WARRANTIES, AND LIMITATION OF LIABILITIES

Avant-Garde Publishing Corporation ("Avant-Garde") warrants to the licensee and no other person or entity the disk on which DAVE WIN-FIELD'S BATTER UP! is recorded (but not the software nor this manual) to be free from defects in materials and workmanship under normal use for a period of 30 days after the date of original purchase. If during this 30-day period a defect should occur, the disk may be returned with a copy of your dated sales receipt and a brief description of the problem to Avant-Garde, 37 Commercial Blvd., Novato, California 94947, for replacement free of charge. Your sole remedy in the event of a defect in a disk is limited to replacement of the disk as provided above. Any implied warranties applicable to the disk shall terminate not later than 30 days after the original date of purchase. If the disk has been physically damaged, is beyond the 30 day limit, or is not accompanied by proof of purchase, include \$10.00 per disk plus \$2.50 per request to cover shipping and handling. Please return the disk only, not the entire package. Do not staple or paper clip the disk. Package the disk carefully to prevent bending, and mark the package "Do Not X-Ray or Use Magnets." We suggest that you ship via UPS, or via U.S. Postal Service with return receipt requested. Avant-Garde will not be responsible for disks that it does not receive unless you provide us with proof of your shipment and our receipt.

DAVE WINFIELD'S BATTER UP! IS SOLD OR LICENSED ON AN "AS IS" BASIS. Except as provided above with respect to the disk, Avant-Garde makes no other warranty or guarantee of any kind, express or implied or statutory, with respect to DAVE WINFIELD'S BATTER UP!, its quality, performance, accuracy, merchantability, or fitness for any particular purpose; and assumes no responsibility or liability to the licensee or any other person or entity with respect to any damage caused or alleged to be caused by use of DAVE WINFIELD'S BATTER UP! THE ENTIRE RISK AS TO THE QUALITY, SUITABILITY, AC-CURACY AND PERFORMANCE OF DAVE WINFIELD'S BATTER UP! IS WITH THE LICENSEE. EXCEPT AS PROVIDED ABOVE WITH RESPECT TO THE DISK, IF DAVE WINFIELD'S BATTER UP! PROVES DEFECTIVE AFTER PURCHASE, THE LICENSEE (AND NOT AVANT-GARDE, ITS DISTRIBUTOR, ITS RETAIL SELLER OR OTHERS INVOLVED IN THE DEVELOPMENT OF THE PRODUCT) ASSUMES THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. In no event will Avant-Garde be liable for direct, indirect, incidental or consequential damages resulting from any defect in DAVE WINFIELD'S BATTER UP! or from any particular application of DAVE WINFIELD'S BATTER UP! by the licensee or any other person or entity, even if Avant-Garde has been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. If any exclusion or limitation shall be determined by a court to be invalid or unenforceable, the determination shall not affect in any respect the validity or enforceability of remaining exclusions or limitations or of the same exclusion or limitation in different circumstances.

Avant-Garde gives no assurance that the information used in the development of DAVE WINFIELD'S BATTER UP! is reliable and accurate. The recommendations provided by DAVE WINFIELD'S BATTER UP! represent only the opinions and judgment of the author and are intended to be applicable in normal circumstances. Individual circumstances may vary and may render certain recommendations inapplicable. Avant-Garde gives no assurance that the opinions or judgment of the author are reliable and accurate. Children, pregnant women, nursing mothers and persons under medical care should consult with their physicians prior to beginning any physical exercise program.

